THE DRUG AND COSMETIC INDUSTRY

ESTABLISHED 1914

Formerly Called "DRUG MARKETS"

September, 1933

Editorials

The Drug Act — Switching — Readers' Questions.

Feature Articles

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FRONT COVER

The picture on our front cover this month shows a native of the Sudan tapping an Acacia tree preparatory to the exudation of gum arabic.

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VOL. XXXIII — **DRUG MARKETS, INC.** PUBLISHERS — NUMBER 3

Publication Office, 28 Renne Ave., Pittsfield, Mass. Editorial and General Office, 101 W. 31st St., N.Y. City

Editor
THOMAS R. FARRELL

Business Manager
FRAZER V. SINCLAIR

PUBLISHED MONTHLY AT PITTSFIELD, MASS., SUBSCRIPTION PRICE, TWO DOLLARS A YEAR, IN ADVANCE, FOREIGN COUNTRIES THREE DOLLARS, THREE WEEKS' NOTICE IS REQUIRED TO CHANGE SUBSCRIBER'S ADDRESSES, AND WHEN NOTIFYING KINDLY GIVE BOTH OLD AND NEW ADDRESSES; PRINTED BY THE SUN PRINTING COMPANY, PITTSFIELD, MASS. ENTERED AS SECOND CLASS MATTER, JANUARY 1, 1928 AT THE POST OFFICE AT PITTSFIELD, MASS., UNDER THE ACT OF MARCH 3, 1879.

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THREE POPULAR PERFUMING OILS
FOR A FULL COSMETIC LINE

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An excellent, full rose scent, acknowledged to be one of the finest low-priced perfume oils on the market today.

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All the captivating fragrance of the Jasmin bloom. It is especially recommended for face powders, talcums and soaps.

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Philadelphia Los Angeles Atlanta Cincinnati Detroit Dallas
Baltimore New Orleans Chicago San Francisco Montreal Havana

Buyers' Guide

The firms listed below are reliable sources of supply which we are glad to recommend to our readers.

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Abbott Laboratories
J. T. Baker Chemical Co.
Benzol Products Co.
California Fruit Growers Exchange
Dow Chemical Co.
Heyden Chemical Corp.
Mallinckrodt Chemical Works
Merck & Co., Inc.
Monsanto Chemical Works
N. Y. Quinine & Chemical Works
Chas. Pfizer & Co., Inc.
Sherka Chemical Co.

Alcohol
A. K. Hamilton
Rossville Commercial Alcohol Corp.
U. S. Industrial Alcohol Co.

Alkaloids
Abbott Laboratories
J. T. Baker Chemical Co.
Mallinckrodt Chemical Works
Merck & Co., Inc.
N. Y. Quinine & Chemical Works

Bromides
J. T. Baker Chemical Co.
Mallinckrodt Chemical Works
Merck & Co., Inc.
N. Y. Quinine & Chemical Works

Citric Acid
H. J. Baker & Bro.
J. T. Baker Chemical Co.
California Fruit Growers Exchange
Dodge & Olcott Co., Inc.
Mallinckrodt Chemical Works
Merck & Co., Inc.
N. Y. Quinine & Chemical Works
Chas. Pfizer & Co., Inc.

Glandular Products
Wilson Laboratories

Magnesia
Schofield-Donald Co., Inc.

Salicylates
J. T. Baker Chemical Co.
Dow Chemical Co.
Heyden Chemical Corp.
Mallinckrodt Chemical Works
Merck & Co., Inc.
Monsanto Chemical Works
N. Y. Quinine & Chemical Works

Aromatic Chemicals
W. J. Bush & Co., Inc.
California Fruit Growers Exchange
Dodge & Olcott Co., Inc.
P. R. Dreyer, Inc.
E. I. du Pont de Nemours & Co., Inc.
Benj. French, Inc.
Fritzsche Brothers, Inc.
General Drug Co.
Givaudan-Delawanna, Inc.
Magnus, Mabee & Reynard, Inc.
Compagnie Parento, Inc.
Sherka Chemical Co.
A. M. Todd Co.
Ungerer & Co.
van Ameringen-Haebler, Inc.

Essential Oils
W. J. Bush & Co., Inc.
California Fruit Growers Exchange
Dodge & Olcott Co., Inc.
P. R. Dreyer, Inc.
Fritzsche Brothers, Inc.
Magnus, Mabee & Reynard, Inc.
Compagnie Parento, Inc.
A. M. Todd Co.
Ungerer & Co.
van Ameringen-Haebler, Inc.

Flavors
W. J. Bush & Co., Inc.
California Fruit Growers Exchange
Dodge & Olcott Co., Inc.
P. R. Dreyer, Inc.
Fritzsche Brothers, Inc.
A. K. Hamilton
Magnus, Mabee & Reynard, Inc.
Monsanto Chemical Works
Compagnie Parento, Inc.
Ungerer & Co.
van Ameringen-Haebler, Inc.

Cocoa Butter
R. F. Revson Co.

Cod Liver Oil
W. Benkert & Co., Inc.
P. R. Dreyer, Inc.
McKesson & Robbins, Inc.

Mineral Oil
M. W. Parsons, Imports
S. Schwabacher & Co., Inc.
L. Sonneborn Sons, Inc.
Stanco Distributors, Inc.

Quinine
Mallinckrodt Chemical Works
Merck & Co., Inc.
N. Y. Quinine & Chemical Works

Cosmetic Materials
J. L. Hopkins & Co.
Innis, Speiden & Co.
M. W. Parsons, Imports
John Powell & Co., Inc.
R. F. Revson Co.

Cosmetics (Private Brand)
Sterling Manufacturing Co.

Bath Crystals
Solvay Sales Corp.

Botanical Drugs
W. Benkert & Co., Inc.
J. L. Hopkins & Co.
Peek & Velsor, Inc.
S. B. Penick & Co.

Absorption Bases
Th. Goldschmidt Corp.
Innis, Speiden & Co.
M. W. Parsons, Imports

Beeswax
Koster-Keunen
Theodor Leonhard Wax Co., Inc.
Will & Baumer Candle Co.

Chalk
Industrial Chemical Sales Co., Inc.
John & E. Sturge, Ltd.
Universal Gypsum & Lime Co.

Colors
Interstate Color Co., Inc.
R. F. Revson Co.

Gums
J. L. Hopkins & Co.
Thurston & Braidich

Lanolin
American Lanolin Corp.
Bopf-Whittam Corp.
Innis, Speiden & Co.

Stearates
Franks Chemical Products Co.
Mallinckrodt Chemical Works
M. W. Parsons, Imports

Talc
Innis, Speiden & Co.

Titanium Dioxide
Titanium Pigment Co.

Zinc Oxide
New Jersey Zinc Co.

Containers & Machinery

Bottles
Carr-Lowrey Glass Co.
Hart Glass Mfg. Co.
Hazel-Atlas Glass Co.
Maryland Glass Corp.
Owens-Illinois Glass Co.

Boxes & Cartons
Crosby Carton Co., Inc.
H. R. M. Gordon
C. F. Hatch Co.
National Metal Edge Box Co.
Douglas Young, Inc.

Collapsible Tubes
National Collapsible Tube Co

Labels
John Horn

Glassine Paper
Riegel Paper Corp.

Packing Material
Kimberly-Clark Corp.

Vials
Kimble Glass Co

Corks
Arco Crown Cork & Cap Co.
Armstrong Cork & Insulation Co.

Metal Caps
Aluminum Seal Co.
Anchor Cap & Closure Corp.
Arco Crown Cork & Cap Co.
Armstrong Cork & Insulation Co.
Crown Cork & Seal Co.
Ferd. Gutmann & Co.
Phoenix Metal Cap Co.

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Anchor Cap & Closure Corp.
Armstrong Cork & Insulation Co.
General Plastics, Inc.
Resinox Corp.

Liners
Armstrong Cork & Insulation Co.

Tablet Counting & Filling Machinery
John W. Ayers & Son

Capping, Filling & Packaging Machinery
Arthur Colton Co.
Karl Kiefer Machine Co.
Geo. G. Rodgers Co.
F. J. Stokes Machine Co.
Stokes & Smith Co.
U. S. Bottlers Machinery Co.

Tanks, Kettles & Mixing Equipment
Ertel Engineering Corp.
Pfaudler Company
F. J. Stokes Machine Co.
U. S. Bottlers Machinery Co.

Production Equipment
Ertel Engineering Corp.
Karl Kiefer Machine Co.
Pfaudler Company
U. S. Bottlers Machinery Co.

"Is it Clarified?"

An important question, whether you use Oil of Lemon "straight" or for extracts

NOW you merely add alcohol to Exchange Brand Oil of Lemon and get immediately a completely clear extract! By demanding this clarified oil you avoid cloudiness or sediment in the solution.

You eliminate delay, filtration and waste, because the insoluble substances which produce muddiness are now completely removed from the oil by the Exchange's exclusive process of manufacture.

Improved Flavor, Color, Aroma

Made from rich California lemons under Exchange standards of production control, Exchange Brand Oil of Lemon has been notable for its fine flavor, color and aroma. The new process further improves these qualities. Exchange Brand Oil of Lemon is uniform in performance and stable in your finished product.

So insist on it—for use "straight" or in extracts.

Make This Test

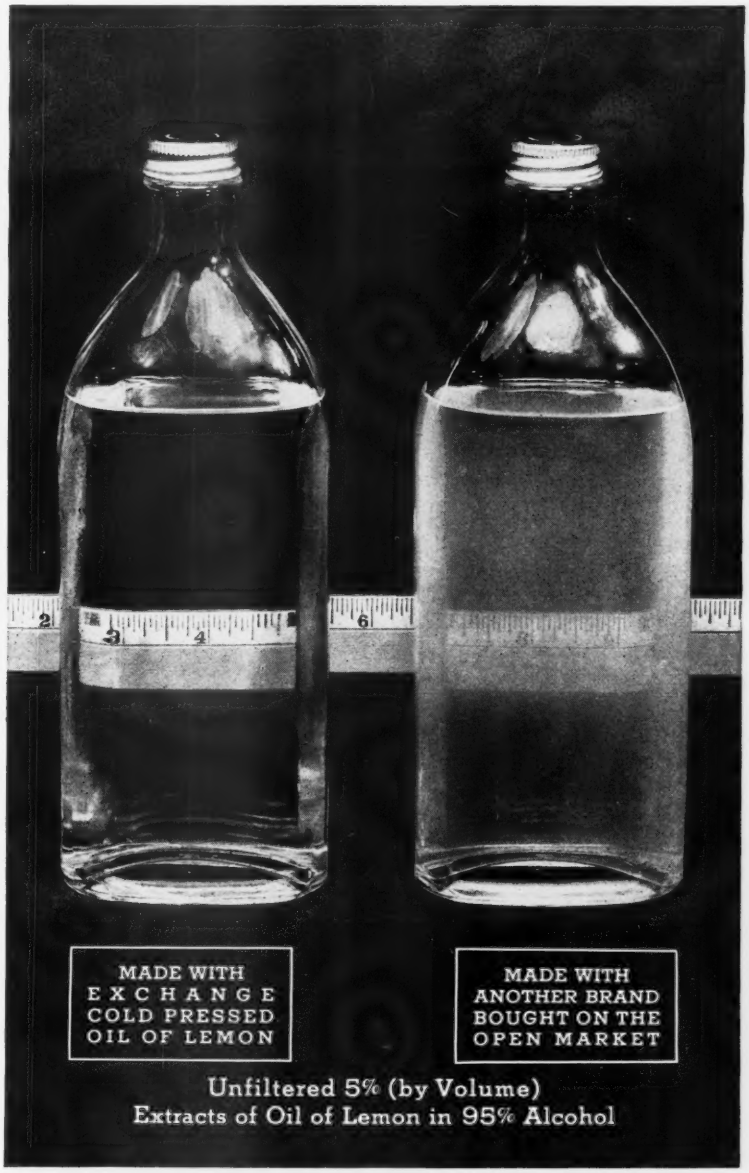
Order a supply now. Test its ability to better your results and lower your costs. Once the advantages are demonstrated, Exchange Brand Oil of Lemon will become your standard.

QUICK FACTS

1. **Flavor** that suggests a freshly-cut lemon
2. Finer **Aroma**
3. Deep natural **Color**
4. **Stable** in your finished product
5. **Uniform Performance**
6. **Lower Cost** per unit of flavor

AND NOW...

7. **CLARIFIED.** No sediment. No cloud. No **filtration.** No waste.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MADE WITH ANOTHER BRAND BOUGHT ON THE OPEN MARKET
Unfiltered 5% (by Volume)
Extracts of Oil of Lemon in 95% Alcohol

A 5% by volume solution of Exchange Oil of Lemon in alcohol conforms to the U. S. Government's definition for lemon extract.

Exchange BRAND

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Sold to the American market exclusively by

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DODGE & OLCOTT COMPANY
180 Varick Street, New York City

Distributors for

CALIFORNIA FRUIT GROWERS EXCHANGE
Products Department, Ontario, California
Producing Plant: EXCHANGE LEMON PRODUCTS CO., Corona, Calif.

Copr., 1933, Products Department, California Fruit Growers Exchange

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To stand still means to drop out. To grow means to continue adapting ourselves to the ever changing conditions of the industry. During the past five years our business has increased over 500%. Today our resources, our modern plants, and our alert and progressive personnel, insure a continuation of quality and service to the trade—and a continuation of our growth.

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BUTYL ALCOHOL
Normal
BUTYRATES
(Amyl, butyl, ethyl, propyl)
COTTON BASE SOLUTIONS
DIBUTYL PHTHALATE
DIETHYL OXALATE
ETHYL CHLORIDE, (COMMERCIAL (For refrigeration and ethylation)
FORMATES
(Amyl, butyl, ethyl, propyl)
GUM SOLUTIONS
ISOPROPYL ALCOHOL
KETACETATE
LEATHER DOPES
(Artificial, Patent and Split)
MONOETHYL ETHER ETHYLENE GLYCOL
MONOETHYL ETHER ETHYLENE GLYCOL ACETATE
MONOMETHYL ETHER ETHYLENE GLYCOL
MONOMETHYL ETHER ETHYLENE GLYCOL ACETATE
PLASTICISERS
PROPIONATES
(Amyl, butyl, ethyl, propyl)
REFINED FUSEL OIL
SECONDARY ESTERS AND ALCOHOLS
SPECIAL ESTERS
SPECIAL SOLVENTS
TRICRESYL PHOSPHATE

Pharmaceutical Chemicals

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(Ethyl Chloride of guaranteed purity for anaesthesia)
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(For flavoring)
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(Flexible and Plain)
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ISOAMYL ALCOHOL, Pure

QUAKER BRAND

Alcohol

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Write for Alcohol and Chemical Booklets, and new Chemical Supplement

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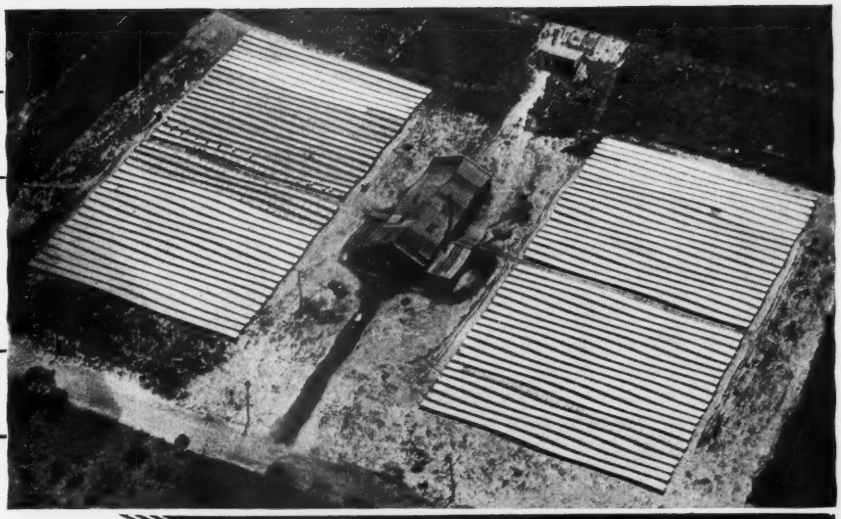
Beeswax guaranteed 100% sunbleached without any chemicals. Visit our bleacheries and convince yourself.



SUNBLEACHED BEESWAX

Many American manufacturers have known Koster-Keunen as a name famous in Europe for the quality of the sunbleached beeswax they have produced for 80 years.

Now for a little over a year Koster-Keunen has also been established in America, at Sayville, Long Island.

Here sunlight and air conditions are as ideal as at the home plant at Aalst, Holland.

Here the same crude wax is sunbleached and refined under the same critical eyes which have made Koster-Keunen the standard of quality in Europe for 80 years.

Now that we are fully established at Sayville, Long Island with increased production facilities, we can offer additional American manufacturers this famous beeswax.

May we send samples and quote prices?

KOSTER KEUNEN (*SUNBLEACHED AND YELLOW BEESWAX*) SAYVILLE (LONG ISLAND) NEW YORK

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WHEN outstanding leaders in the drug, pharmaceutical, toiletry and food products fields turn to Kimble Vials to solve their sampling and packaging problems, the reasons are worth consideration:

1. First of all, Kimble Glass Vials are automatic-machine-made for uniformity and fine finish.
2. They make the lightest glass package known, minimizing mailing and shipping costs.
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5. Kimble Vials serve as individual show windows for your products, radiating purity, sanitation, and inviting sales.

* * *

Confer with us on your sampling and packaging requirements. We have saved time and money for many nationally known concerns who now merchandise their product in glass . . . and whose sales and profits have increased substantially.

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VINELAND, NEW JERSEY.

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By Ewing Galloway, N. Y.

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When we sell tooth paste, it stays sold. No throwbacks because of trouble with the paste.

At our annual meetings the plant superintendent comes up from the factory and the Doc from the laboratory to tell us about the materials used in our tooth paste. They always talk about Sturge's Standard Precipitated Chalk.

I'm glad our company uses the finest raw materials. I'm glad they are so insistent on the kind of uniformity to meet our formula that they always mention when talking of Sturge's Standard Precipitated Chalk.

Does this go big with the sales department? You bet it does.

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271 Madison Ave., New York, N. Y.

FOR A GOOD TOOTH PASTE

A PHOTOGRAPH does not mean much unless there is a personality or an achievement back of it.

The picture presented here is of Thomas G. Leek, theman responsible for the production of Precipitated Chalk in this country on a scale undreamed of five years ago. Mr. Leek is a Chemical Engineer with many years of experience in the manufacture of Chemicals and their application and introduction in the arts. His technical qualifications assure knowledge and control of quality in the production of Precipitated Chalk required to meet various specifications and ability to furnish same uniformly day by day. Mr. Leek has done more. He has written "An American Story of Precipitated Chalk," explaining about the research and the painstaking operations required to produce high class chalk which will meet every need.

He wants to send you a copy. If you have even a remote interest in Chalk, ask for the booklet, because it may open up new angles for you and your products.

Lest you forget, write for your copy today.

An American Story of Precipitated Chalk

SEND FOR THIS BOOKLET

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POWDERED
CRYSTALS
GRANULATED

TARTARIC ACID

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ACETYLSALICYLIC ACID U.S.P.
Fine Crystals, Powder and Granular.
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METHYL SALICYLATE U.S.P.

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We also offer the following Medicinal Chemicals, which are sometimes combined with Salicylates in tablet formulas:

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Powder

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Antipyrine U. S. P.

Cinchophen U. S. P.
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Cinchonidine Sulphate U. S. P.

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Pharmaceutical and Drug Manufacturers Prefer

Baker's POTASSIUM SODIUM AMMONIUM Iodides

Because of Their Freedom from Iodates

The Alkali Iodides, Potassium, Sodium and Ammonium with minimum impurities have long been made by The J. T. Baker Chemical Co. for laboratory research work, and sold with exact analysis on the label as Baker's C. P. Analyzed Reagents.

Pharmaceutical and Drug Manufacturers also appreciate Baker's Potassium, Sodium, and Ammonium Iodides, U. S. P. They are not only free from Iodates, but relatively free from the other closely associated halogens—Chlorine and Bromine Compounds. As a result, Baker's known quality standards are preferred.

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Philadelphia 220 South 16th Street
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Acid Carbolic USP Fused Crystal
Acid Citric USP Crystal, Granular or Powder
Acid Salicylic USP Crystal and Powder
Ammonium Bromide USP Granular
Bismuth Metal C.P. Lump 99.8%
Bismuth Metal C.P. Granular 99.8%
Bismuth Nitrate C.P. Crystal and Purif. Crystal
Bismuth Subcarbonate USP Powder
Bismuth Subgallate USP Powder
Bismuth Subnitrate USP Light Powder
Iodine USP Resublimed
Lead Acetate USP Crystal and Powder
Lead Acetate Tech. Crystal
Lead Acetate C.P. Basic Dry Powder
Magnesium Oxide USP Light Powder
Potassium Bitartrate USP Pow. (Cream of Tartar)
Potassium Bromide USP Cryst., Gran. or Powder
Potassium Hydroxide USP Sticks
Potassium Iodide USP Cryst., Gran. or Powder
Silver Nitrate USP Crystal
Silver Bromide USP Granular
Sodium Bromide USP Powdered
Sodium Hydroxide USP Sticks (Caustic Soda)
Sodium Potassium Tartrate USP Cryst. or Powd.
Sodium Salicylate USP

MANUFACTURERS OF
"Baker's Analyzed"
C. P. CHEMICALS AND ACIDS

Focus of progress
in process and product

Two years have passed since the previous Exposition of Chemical Industries—eventful, crowded years. Progress in process development has been startling. Old products have been revolutionized, countless new ones have been born.

The need for applying cost-reducing, product-improving methods, materials and machines is greater than ever, and this year's exposition will focus the most modern, most advanced, most efficient.

No manufacturer whose executives and operating staff attend this exposition and apply what they can learn, need fear the *penalties of obsolescence* nor the *progressiveness of competing industries.*

Progress is focused here. This year's, the fourteenth Exposition is the time and place to look, listen and GO! Not again until *1935* will such an opportunity exist.

Management International Exposition Company ㊦ 108

The DUO-OVAL

Smaller size Duo-Ovals are excellent for hand lotions, extracts, etc. Larger sizes for mineral oil, medicinal tonics, rubbing alcohol, antiseptics, cough syrups, cold remedies, cod liver oil, etc.

A "New-Deal" Design That Does Double Sales Duty

● Here's a container styled definitely for changing market trends of the New Deal Era. With present developments in the drug trade and allied industries, today's package must do a *super* display job. For new products, particularly, Duo-Oval is a fighting salesman. "Sales appeal" is written into its every feature.

An individual design on each face of this OnIzed glass container combined with distinctive label treatment, permits you to package *different lines of products in the one style of container—and to cut* bottle costs by ordering in large quantities. Its sparkling clearness *gives striking display value to your product. The strong vertical* lines proclaim dignity. Handsome, black screw caps add smartness *and provide an air-tight seal.*

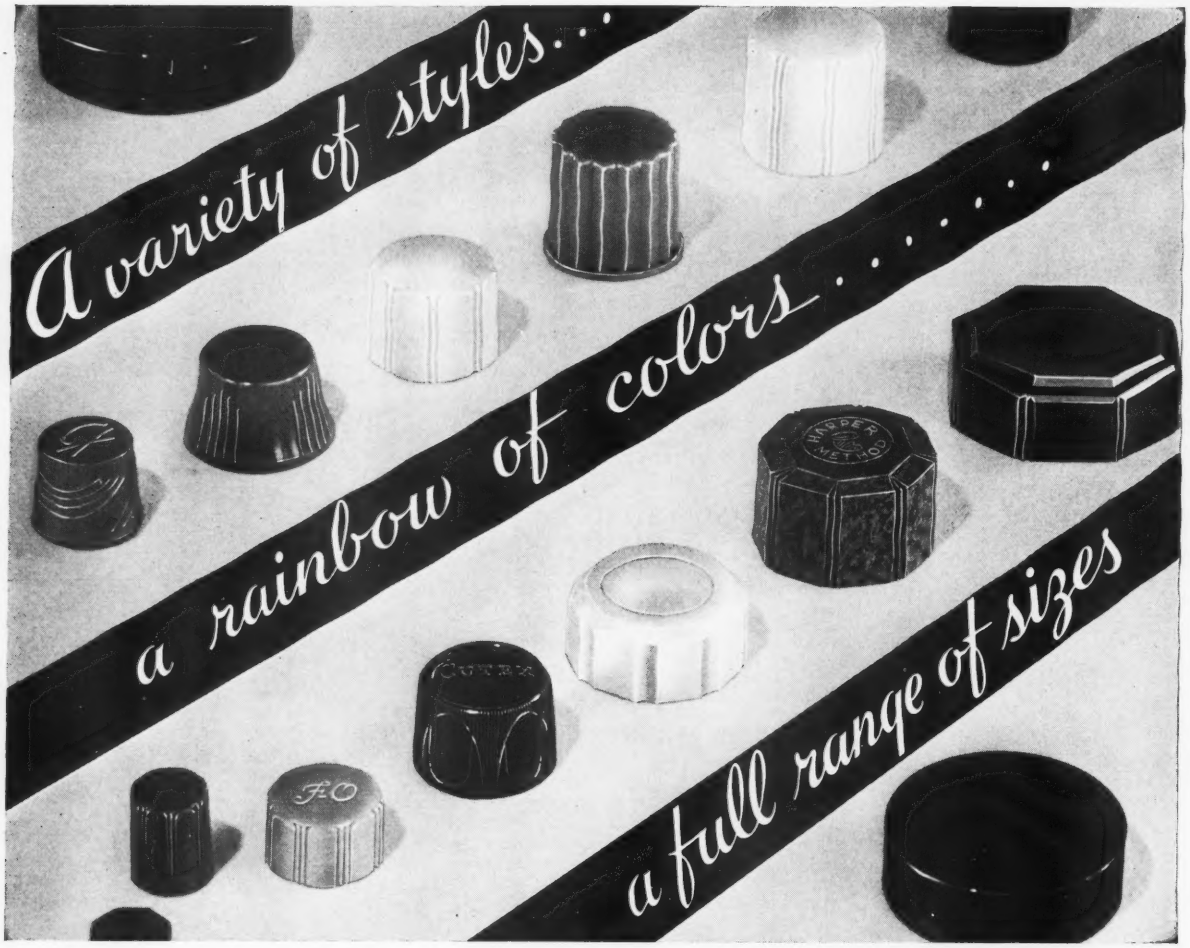
Because of the Duo-Oval's unusual characteristics, we have not deemed it advisable to offer it as a regular stock item. It will be manufactured only to the special order of those whose requirements justify large volume production. Inquiries are invited.

Owens-Illinois Glass Company, Toledo, Ohio

OnIzed
PHARMACEUTICAL AND PROPRIETARY WARE

OWENS-ILLINOIS

1873 · SIXTIETH ANNIVERSARY · 1933



All you could ask for is offered in Artmold Caps

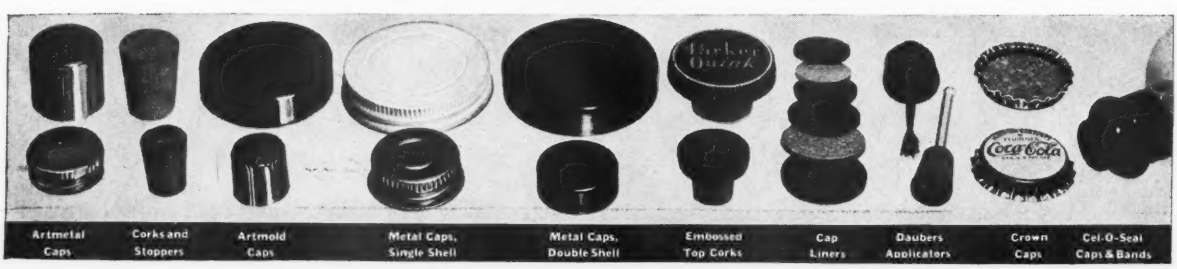
NAME your needs in a molded closure. It's here . . . or we'll make it to your order! In Armstrong's complete stock line, there are colors to harmonize with any label—sizes for all standard C. T. finishes from 8 mm. to 100 mm.—designs that lend grace to containers of all shapes.

And, as we've said, if you must have a private molded-to-order cap, we can supply that, too! Our Package Styling Department will gladly put heads together with you in a study of your problem and create an artistic design to harmonize with your package ensemble.

Meanwhile, let us send you the whole, colorful story of Armstrong's Artmold Caps and Jar Covers. The facts, too, about Armstrong's free laboratory service for determining the exact type of liner your product needs for proper sealing. Just write Armstrong Cork & Insulation Company, Closure Division, 913 Arch Street, Lancaster, Pennsylvania.

Armstrong's ARTMOLD CAPS

Consider, also, these other closures in the complete Armstrong Line



1/3 OF YOUR MARKET

Her ten million families have more money to spend than in years.

The farm woman is the purchasing agent for 39.3% of the population of the United States.

She represents a third of the American market for drugs and cosmetics.

One magazine, and one magazine only, is published exclusively for her.

THE
FARMER'S WIFE
Webb Publishing Company
NEW YORK SAINT PAUL CHICAGO

The makers of these products are cultivating this great market through The Farmer's Wife: VICK'S VAPO RUB • LISTERINE LUX TOILET SOAP • LAVA SOAP • DR. SCHOLL'S ZINO PADS • PARKE DAVIS PRODUCTS • PEPSODENT TOOTH PASTE SQUIBB'S TOOTH PASTE • VASELINE • VAPO CRESOLENE

TIMELY FOR September

Acetphenetedine
Acid Acetylsalicylic
Acid Citric
Acid Lactic
Amidopyrine
Bismuth Salts
Calomel Precipitated
Hexamethylenamine
Iodine Tincture
Phenobarbital
Potassium Acetate
Sodium Acetate

•

AT THE WORLD'S FAIR

Listen to the Voice of Mallinckrodt on Stearates and other Mallinckrodt Chemicals for Cosmetic and Technical Purposes.

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REMEMBER THE FULL LINE OF MALLINCKRODT REAGENTS

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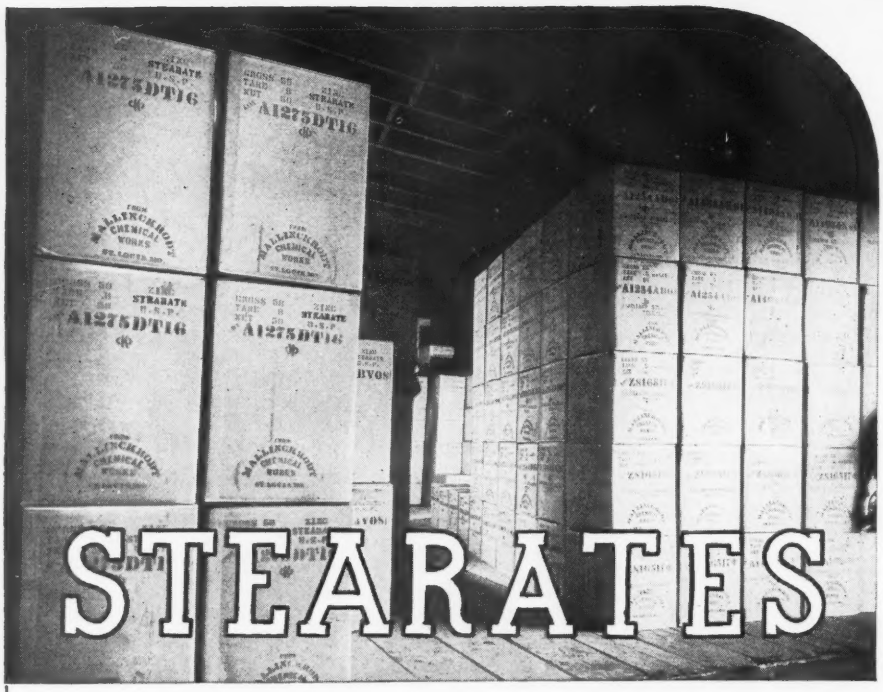

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The Drug Act

THE fact that the proper manner in which to oppose passage of the proposed Food and Drugs Act in its present form is to determine just where this act is opposed to the public interest is gradually being realized by manufacturers. Attempts are being made from having this industry oppose the measure because it merely clashes with interests of manufacturers, wholesalers, retailers, or publishers who profit from the advertising of the industry.

BY AND large, this industry is one which is interested in improving health conditions. The best houses and associations in the trade realize that their best interests are served by being ultra-careful about their quality, being industrious in research for scientific advances in medicine, and in being truthful in their advertising. Such houses are a credit to the Nation, and it is only due to the fact that at times they might be too close to their subject and their viewpoints might become warped, that any regulation of them is at all necessary.

BUT it is true that there do exist houses which should have no place in the industry. They pay no attention to quality, research, or truth in advertising. For such houses stringent regulation is necessary.

BUT we doubt very much that any such legislation as that proposed is necessary. When one reads certain publications and realizes that present laws are more than sufficient to stop many of the advertisements which are appearing today, we wonder why more law is necessary when proper use is not made of those already in existence.

IF THE public is to be sold out to the medical profession by a government which is unwilling properly to enforce the existing laws, then it is going to be just too bad for the public.

University of NC

Switching

Sometimes we wonder where certain associations get the ideas that they promulgate. Within recent times we have seen nothing that approached in utter stupidity the attempt to have the retail druggist subject to an anti-switching clause under the NRA. It is all very proper to feel that if the manufacturers are going to join in a common movement to back inclusion in the various codes the right of contract to maintain prices, then in return the manufacturer should be able to prevent the retailer from switching, but is such a thing at all possible?

After all, a pharmacist is a professional man who has been properly educated to the preparation of medicinal products. It is within the province of his professional training to know what medicines are largely composed of, and what properties the various drugs exert upon the human system. Is it possible by means of a code to prevent this man from practicing the profession which he has trained for and which he is licensed by the sovereign state to practice?

Switching is something that can not be approached in this way. And if the manufacturers are to bargain with price maintenance upon this basis, they had better stop wasting their time. Probably the only way which manufacturers have at their command is to assure retailers some sort of a profit by a code which will force them to sell at some fixed percentage above invoice cost. For if retailers were sure of some profit on every sale, they would be much less likely to spend quite so much time on switching.

After this has been done, manufacturers can do no more than attempt to keep the spread between their advertised products and the private brands at a minimum. In other words, after they have seen to it that the retailer is assured a profit on their goods, they must not attempt to make their advertising carry too heavy a load or they might find that they are nullifying it.

Readers' Questions

With this issue we institute still another department which should prove very interesting to our subscribers. This is the department entitled, "Readers' Questions." We have had such heavy correspondence in answering all the questions that come to the editor's desk that we have decided to publish those questions and answers which have a broad appeal in the hope that many subscribers will find the answers to their questions in this department making it unnecessary for them to write for the same information.

We shall maintain in this department a policy of not mentioning either the names or initials of the writers. We also must make the rule that we can not attempt to answer any questions where extensive research is involved. Any questions which can be answered by recourse to our many sources of information, will be answered gladly, so fire away.

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New and Non-Official

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All-American Blue "Thunderbird"

The Blue Eagle is strictly an American bird, in spite of traducers who have been trying to label it a German or a Russian importation.

It is, as a matter of fact, a "thunderbird," and its American antecedents are older than those of even the Pilgrim fathers.

The "thunderbird" is an ancient American Indian emblem, used particularly by the Navajo and the Pueblo Indians as a good omen, a symbol of favorable weather conditions, good times.

None of the first eagles drawn by artists called on to design the NRA insignia pleased Administrator Hugh S. Johnson. Finally Charles T. Coiner, art director for N. W. Ayer & Son, came to Washington and borrowed an armful of books from the Indian Bureau. He found the "thunderbird," and the emblem that now constitutes the buyers' password is the result. The Administration particularly likes the fact that it is an omen of better times.

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D. T.'s to You

"The Pharmaceutical Journal" of England reports that eel blood has been used to make a drunken man sober.

We still think they're snakes and that they're alive, but we will vouch for the sobering effect.

The Journal Comes Through!

The A. M. A. Journal, always our favorite humorous magazine, informs us that Phrosted Phroot Pie (pronounced Frosted Fruit Pie) is not acceptable.

Phrankly, this has us all aphlutter.

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The Battle of Initials

Proctor & Gamble seems to feel that M. S. is just as bad as B. O. "Medicine smell" and "Body odor," in case you haven't heard.

• • •

Exempt Executives

It may be just our suspicious nature, but we rather expect a sharp advance in the number of vice-presidents as the codes go into effect.

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Ten Years Ago

From our pages, September, 1923

Japanese-American Commercial Weekly states that Japanese mint farmer and American consumer are victims of menthol gamblers. Farmers in Japan, discouraged, grow less mint.

Many new products from American plants will be shown at the Chemical Exposition this year, as a direct result of reduced competition from abroad, due to the Ruhr Occupation and the Fordney-McCumber Tariff.

The Chemists Club, New York, will celebrate the silver anniversary of the founding of the club.

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Our July Cover

Our July front cover was designed to typify the spirit of research which pervades the Drug and Cosmetic Industry. The photograph, which was selected from a handsome book published by Merck & Co., as a souvenir of the dedication of their research laboratories, showed the true scientists at work. The caption "Research or Bust" is an expression of that lovable dean of manufacturing pharmacy, J. K. Lilly, which expression Mr. Lilly used in his address at the dedication.

The Food and Drugs Act

In this article we attempt to point out what we consider the proper way in which to oppose the new Food and Drugs. We have indicated some instances where the new act is opposed to the public interest.

THE fight against the proposed Food and Drugs Act, insofar as that act is designed in a manner which would not only wreck the package medicine industry, but would also work directly against the public interest, should be organized without delay. From the analysis of the new act presented in our August issue the points at which the proposed act is at variance with the public interest are clear as a pikestaff.

In the first place the disclosure of the formulas of proprietary medicines on the packages would be harmful to the public from two viewpoints. The first is that developments in medicines which represent real advances in therapeutics, are made by manufacturers for the reason that the manufacturers will be able to profit from the sale of their products while they are improving the condition of the public health. If these manufacturers were afforded no such protection, then they would be unable to spend large amounts of money in therapeutic research by means of which these products are discovered. Further, if everyone is to be allowed to copy directly the formulas of these products, then, even though they are discovered, no one is going to spend the money necessary to educate either the medical and pharmaceutical professions, or the public to the benefits to be derived from them and thus they are never going to be used.

One other reason why formulas of proprietary medicines should not be published on the package, is the fact that a patient often reacts to medicines in an entirely different way if the ingredients are known. This fact will be testified to by the leading physicians of the country who, many times, demand that the patient shall not know the ingredients of prescriptions. Often a patient will make the statement to a physician that Aspirin, Luminal, Pyramidon, Bromides, or any one of a number of other products has no effect upon him. But if he is given an Aspirin tablet of different color or shape, or any of the other products properly disguised, the results will be very definitely in the proper direction.

If anyone has any doubts by whom the advances in therapeutics are made, let him study the U. S. Pharmacopoeia and see how many of the products listed in this book were originally introduced as proprietaries. Or just let him study the list of additions to any edition of the Pharmacopoeia and see the very heavy percentage of these products—recognized as invaluable by the medical profession—which were introduced as proprietaries between publication of two editions of this book.

The part of the bill (paragraph i, section 8) which refers to germicides decidedly opposed to the public interest for the reason that it attempts to write into a federal bill a specific method of legislating label statements for a group of products regarding which new knowledge is being gained very rapidly. The knowledge regarding antiseptics and germicides which will come to light during the next few years might easily make this part of the act look ridiculous. Perhaps it would be impossible for manufacturers to work in the public interest when this information is discovered, without having the bill revised by Congress,—a long and cumbersome—and perhaps costly—process, which might cause a bill written plainly in the public interest to react against the public.

The manner in which the restrictions are to be thrown around advertising of products in the proposed bill would certainly be against the public interest since it would prevent a manufacturer mentioning in his advertisement the names of diseases for which the product being advertised is not a cure but merely a palliative. This would prevent the advertising of medicated salves for use in chest colds, influenza, etc. It would prevent the advertising of aspirin or any other products for these same diseases. In fact it would prevent mention of a cold in any advertisement since there is no known specific cure for all types of cold.

Such a provision would clearly take away from the public all knowledge of what to use for many of the simple ailments to which man is subject, and which are often cured at home with simple remedies. It would place the ordinary citizen of the country in the position of being forced to go to the doctor with the simplest of disorders, since neither the package nor the advertisement would contain any information as to what the product is good for unless it happens to be one of the *four* specifics which are known to medical science.

Further than this, if one will take the trouble to inspect the prescriptions which physicians send to druggists for just this type of disease he will find that they are composed of just the ingredients which the manufacturers would be prevented from advertising for these diseases. Further than this, any one who inspects these prescriptions will also find that the physician prescribes the same preparation for all his patients with the same symptoms—it makes practically no difference as to the general condition of the

patient or as to the age of the patient. The fact of the matter is that the physician generally treats any symptoms by trying the very simple remedies. Only after two or three visits, when he finds that the simple method of treatment does not work, does the physician really attempt to use his professional training in the treatment of any disease. Under such circumstances, why is it in the public interest not to allow manufacturers of medicinal products to advertise their products to the public for the alleviation of those conditions for which the physician prescribes them? Is it in the public interest to force every citizen to pay a physician's fee for several visits to obtain exactly the same method of treatment which he himself would use if these products were properly advertised to the public?

As a case in point, it is now quite generally recognized that aspirin and bicarbonate of soda is almost a specific for colds. This combination not only cures colds in most cases, but it also alleviates the symptoms either of colds or of influenza. Yet the proposed measure would make mandatory the type of enforcement which was inaugurated by Dr. James J. Durrett, recently chief of drug control. Every manufacturer knows that Dr. Durrett's idea of enforcement was not in the public interest any more than it was in the interest of the manufacturing drug business.

Another result of such a provision in the Food and Drug Act would be the passing around of prescriptions. If one member of a family had a cold or influenza and the physician gave the patient a prescription for the condition, the same medicine would be used by any other member of the family if this other member fell sick with the same symptoms. And while the other member of the family would probably be just as well off as if the physician were called—since the physician would probably prescribe the same thing again—would not the members of the family be just as well off if they used some proprietary remedy advertised for the same condition?

Consider also the plight of those people who live ten or fifteen miles from a physician, in places where the fee of the physician is priced at so much per mile. Certainly these people should not be forced by law to call a physician every time one of them is suffering from a simple ailment of temporary nature which would immediately react to one of the many proprietary medicines which are sold in the general stores. What right has the government to prevent these people from being educated through advertising to knowledge of these products?

Such a law will not stamp out self-medication any more than the prohibition amendment stamped out liquor. Knowledge of the use of drugs would be passed on by word of mouth and probably far worse conditions would exist under such a law—so far as the public health is concerned—than exists today. The average citizen is thirsty after just such knowledge, but he is apt to discount much of the statements contained in advertisements today. If such a law were passed he would become aware of the fact and would thenceforth take every word of every advertisement as absolute truth. Furthermore he would take the advice given him by his neighbor (which of course would have been obtained from reliable sources) as absolute truth.

There are so many points where the new law clashes with public interest that there should be no difficulty in preventing its passage at least in its present form. The act would certainly increase the tax of the medical profession upon the average citizen. The fact of the matter is that organized medicine, in pushing passage of such a law, is not working in the interest of either the public or the average physician. Organized medicine is not working in the interest of the average physician for the reason that the newly developed remedial products which are placed in their hands by manufacturers, adding to their ability to successfully treat diseases would cease to be developed. But further than this, organized medicine is not working in the interest of the physician for the simple reason that such socialization of manufacturing pharmacy is only one step removed from socialized medicine. And such a law would so raise the doctor's bill in any one family that the demand for socialization of medicine would increase to a point at which it could not be denied.

The Industry's Bookshelf

Compensation in the Professions, by L. W. Bartlett and M. B. Nell, 187 pages, Association Press, New York, $2.00 net.

A study of essential professional services presenting significant trends and patterns of compensation in the major professions. Sixteen criteria of compensation derived from these professions are offered, as a result of this study, for the guidance of practitioners, administrators and the public generally.

Calcium Metabolism and Calcium Therapy, by Abraham Cantarow, 252 pages, Lea & Febiger, Philadelphia, $2.50 net.

This book shows how calcium may be correctly and safely used in medication. The dangers which exist in disturbing the calcium metabolism are indicated, as is the physiological basis for its employment. This is a revised edition which includes all of the recent developments in this field.

Manual of Pacific Coast Drug Plants, by Ernst T. Stuhr 189 pages, published by the author at Oregon State College.

A consideration of the medicinal plants thriving throughout the Pacific slope states—presenting the scientific and common names, part used, therapeutic uses and approximate range of the respective plants. Especially adapted as a reference of existing economic plants.

Public Health Nursing in Industry, by Violet H. Hodgson, 249 pages, Macmillan Co., New York, $1.75 net.

Current practices and procedures that have been found successful in modern industrial nursing. Lays special emphasis on opportunities for health education in this field by pointing out objectives and means of arriving at them.

In Defense of The Cold Cream

By Everett G. McDonough, Ph. D.

In this article Dr. McDonough seeks to justify the regular type cold cream which many are attempting to displace with the newer type creams. Dr. McDonough's comment makes interesting reading.

WITHIN the past five years the cosmetic market has been literally flooded with products claiming to be different. In particular has this been true in the facial cream preparations. When it would appear that there could not be another possible different type, along would come an ingenious mind with another original theory as to how a cream should work and this cream was then created in a manner to fulfill this hypothesis.

In desperation the chemist (or cream creator) searched about for every possible raw material that would give a different cream so that at least support would be lended to the theory. Eucerin was rediscovered and overnight, figuratively, oxychloresterol absorption bases were flooding the market. Absorption bases do have merit and they are a valuable addition to the raw material lists but the preposterous claims that were made could not possibly be fulfilled and in many instances this group has fallen into disrepute. Almost a similar fate has fallen to the lot of triethonolamine—a material that rightly used, has many wonderful properties of which to take advantage. When this weak organic base was first offered commercially and it became known that its soaps (oleates and stearates) were powerful emulsifiers—it was immediately put to work to do the most impossible task. Again a long list of exaggerated claims and again the lack of fulfillment and the subsequent unwarranted resentment—and another excellent raw material black-listed by many manufacturers. Others could be named—in fact nearly every new raw material brought into this field suffers this fate. The two above were named because they are emulsifying agents—and it is through emulsifying agents that the greatest apparent (to the eyes of the customers) changes are made in the cream.

With all the onslaught of new ideas, new creams, and new emulsifying agents there has stood one proven type of cream—an oil in water type, that depended upon its emulsion, the combination of the borax in the water and the wax in the oil to form the emulsifying agent.

This type of cream was not founded on theory. Its whole reputation has been built upon the fact that for several generations (almost for ages) it has given that desired result. Theories after theories have been propounded to explain its virtues. Exaggerated claims have been made regarding it but the women of America and Europe are so familiar with its use that they know what to expect and require that it fulfill only these expectations.

Cold cream is the original cream of this type. Today there are very few houses in the civilized world that are not familiar with cold cream and its properties. Even the U. S. Pharmacopoeia recognizes its efficacy and has standardized its formula:

Ointment of Rose Water

Spermaceti	125 grams
White Wax	120 "
Almond Oil	560 "
Borax	5 "
Rose Water	190 "
Total	1,000

Physicians prescribe it. In some firms that manufacture drugs it is the only cosmetic product that they market.

From the original cold cream have sprung many modified forms, some that have gained considerable popularity. Many of the so-called nourishing creams are of a cold cream base with added material to give increased emollient properties.

The emulsion is so stable that it lends itself to formula modification. Spermaceti, beeswax, lanoline, mineral oil, petrolatum, paraffin, ozokerite, almond oil, fats of

(*Continued on page 266*)

Gums and Resins

By Victor G. Fourman*

This industry uses many, little-publicized gums and resins. Dr. Fourman tells us of some of them.

ORGANIC chemists have investigated many raw materials, both natural and synthetic, which are used in the manufacture of drugs, and cosmetics. The study of gums and resins has been comparatively neglected so far as it relates to the use of these materials in the cosmetic industry. Some of the gums and resins have been used from earliest times; frankincense and myrrh are mentioned in the Old Testament. Labdanum is the first perfume that was recorded and opopanax was used by Hippocrates. But notwithstanding their antiquity, there is little known about the exact chemical nature of such materials. The chief reason for the paucity of our knowledge is the fact that gums and resins are difficult to investigate. As a rule, it is impossible to obtain them in a pure state; they cannot be distilled without decomposition nor crystallized from the common organic solvents. When chemists carry out organic syntheses, one of the undesirable results they most often wish to avoid is resin-formation. Yet some of our important commercial products are synthetic resins.

P. S. Busschaert

Exudation of Gum Arabic

Chemical inquiry has not been carried on far enough to make even the scientific classification of gums and resins possible. Gums have been defined[1] as "vegetable carbohydrates occurring as cell contents or as modification of the cell wall." The distinction between gums and resins is based on the fact that gums are soluble in water and not in alcohol; conversely alcohol dissolves resins but not gums. Gum-resins are mixtures of gums and resins. Oleo-gum-resins contain, in addition some volatile oil. All of the above mentioned materials are, generally, exudated milky juices from plants and are dried by spontaneous evaporation. When triturated with water, the gum dissolves, yielding an emulsion, while the resin separates out. Ten to fifteen parts of a 60% aqueous chloral hydrate solution will usually dissolve both the gum and the resin, leaving behind such impurities as sand and wood fibre. From this solution the gum may be precipitated upon the addition of alcohol. It is possible, therefore, as a rule, to separate gum, resin, and impurities from one another by the use of water, chloral hydrate, and alcohol.

Most gum-resins and oleo-gum-resins are obtained from shrubs or small trees growing in tropical or subtropical climates. The amount of ash in these materials is seldom over 4% unless they have been subjected to adulteration. When incisions are made in the bark of the tree, the milky juice exudes and is collected. In some instances the juice hardens while flowing, forming nodular lumps or "tears."

One of the most commercially important gums is Gum Arabic, also known as acacia and gum senegal. It is obtained from shrubs or small trees growing in

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Northern Africa. The principal species yielding this gum are A. Senegal, A. Arabica Willd., A. Seyal. The tears are graded from 1 to 12. This grading is based on purity as judged by lightness of color, transparency, and solubility in water. The better grades of gum arabic are pale yellow. They dissolve in two parts of water, forming a light clear mucilage. The limit of insoluble matter in a high grade gum arabic is only about 0.2%. The water solution is feebly acid to litmus. Inferior grades contain tannin, which is readily detected by means of ferric chloride. The gum consists mainly of the so-called arabic acid, whose empirical formula is $C_{12}H_{22}O_{11}$, in combination with calcium, potassium and magnesium. Gum arabic is not colored blue by iodine so that formation of the blue color with this reagent is an indication of adulteration with starch. The powdered gum is sometimes adulterated with dextrin; such adulteration changes the slight levo-rotation of gum arabic solution to dextro-rotation when dextrin is added in sufficient quantity.

Another gum of commercial importance is gum tragacanth. It is the dried gummy exudation from Astragalus gummifer or other Asiatic species of Astragalus. Tragacanth exudes in thin bands or ribbons or in vermiform cylinders. It is whiter than gum arabic and much harder. Unless it is first heated it is difficult to powder. Like all true gums it is insoluble in alcohol and in ether. In fifty parts of water it partly dissolves to form a soft jelly. Tragacanth contains a large amount of bassorin, the chemical nature of which little is known. It also contains considerable starch and, therefore, unlike gum arabic, it forms a blue color with iodine. The ash content of tragacanth should not be over 4%. This gum deteriorates on storage. Evers and McLachlan[2] have shown that the appearance of commercial samples is not an indication of relative jelly value. This gum is used extensively in the manufacture of various lotions, hair preparations, and cosmetics in general.

While opopanax is no longer used in medicine, it is of considerable value in perfumery and in toilet soaps. It is said to be derived from the Opopanax chironum, a native of Southern Europe. Opopanax consists of resin, gum and a small amount of volatile oil. Hlasiwetz and his students[3], who carried out some of the earliest scientific work on resins at Innsbruck, Austria, over sixty years ago, found that one of the products obtained on fusion of the resin of opopanax with potash was catechol. Some very interesting perfume compositions have been made by blending opopanax oil with lavender oil, palmrosa oil and Peru balsam.

Labanum, also called labdanum, black amber and black balsam, is a soft sticky resinous exudation of the glandular hairs of Cistus Creticus, a small rock rose with purple flowers. Labdanum possesses a peculiar but characteristic sweetness and imparts a lasting character to other perfumes. It has been used in medicine and probably has an antiseptic action. Cretan labdanum contains about 50 to 55% resin, 3% volatile oil, and about 25% ash. Masson[4] obtained the oil from labdanum by steam distillation and found that it contains, among other substances, phenols, alcohols, hydrocarbons, sesquiterpene derivatives, and two ketones. He identified the latter as acetophenone and 1, 5, 5-trimethyl-6-cyclohexanone. The second of these ketones, $C_9H_{16}O$, had the following physical constants: b.p. 178-9 at atmospheric pressure; b.p. 66-7 at 10 mm.; d_0 0.922; n_D^{23} 1.4494. It was found to be optically inactive. Its oxime melted at 106° and its semicarbazone at 220-1°. E. Gerardin[5] has published a comprehensive dissertation on the origin, harvesting, composition and uses of labdanum.

Olibanum, commonly known as frankincense, is another gum-resin which has been used from earliest times. It is obtained from Boswellia Carterii and other species of Boswellia. It occurs in small tears, pale yellow or light green in color. It contains about 60 to 70% resin, 3 to 8% volatile oil, and not more than 10% ash. Myrrh, like olibanum, has been used as a constituent of incense. Probably no other perfume material is more often mentioned in poetical writings. Commiphora myrrha, Nees, and other species of Commiphora are the source of this reddish-yellow oleo-gum-resin. The small tree from which it is usually obtained grows best in Somaliland, Northern Africa. The "tears" contain not less than 30% of alcohol soluble material and not more than 4% of acid insoluble ash. Its most important constituent is oil of myrrh (about 2 to 5%). This is a thick yellowish brown liquid of specific

(*Continued on page 268*)

Sorting Gum Tragacanth

Thurston & Braidich

Packing Gum Tragacanth

Liniments

With the approach of the Winter season, demand for liniments will be on the increase. In this article we present ingredients and method of manufacture of many types.

RELIEF of pain through external application of anodynes is based upon sound therapy because such preparations serve to draw the blood to the affected area and stimulate circulation in that area means of gentle massaging. There are many types of liniments intended for the relief of pain and congestion but all are functionally similar in that they consist of active agents, irritants, soothing agents and aromatic oils dissolved in solvents. Some of these medicaments draw blood to the surface; some pass through the skin into the blood stream; some facilitate that passage by producing a temporary hyperemia or even a mild dermatitis artefacta.

Among the materials commonly employed are the following:—

Solvents: Alcohol, isopropyl alcohol, chloroform, ether, ammonia, kerosene, glycerin, turpentine.

Active Agents: Menthol, potassium iodide, thymol, eugenol, chloral hydrate, acetic acid, phenol, sulphur; the tinctures of capsicum, camphor, aconite, iodine, belladonna, opium, arnica.

Soothing Agents: Olive, peanut, almond, sesame, croton, goose and cade oils; soft soap, soap liniment, lanolin, balsam of peru.

Essential Oils: Sassafras, clove, anise, cedar leaf, hemlock, origanum, lavender, rosemary, cinnamon, amber, thyme, nutmeg, wintergreen, lemon, mustard, calamus.

There are many others of course but these are the commoner ones. It is obvious that many of these, especially the essential oils serve more than one function.

In the following typical formulas we have attempted to guide the experimenter by showing the proportions in which the aforesaid materials are used. It is urged that none of these formulas be used without experimentation and shelf testing.

MUSTARD LINIMENT

Oil of Mustard	35 cc
Camphor	50 grams
Menthol	20 "
Olive oil	150 cc
Alcohol q. s. to make	1,000 "

Procedure: Dissolve camphor and menthol in alcohol, add oils and filter.

CAMPHORATED SOAP LINIMENT

Stearic aicd	50 grams
Water	100 cc
Sodium carbonate monohydrated	10 grams
Thymol	25 "
Oil Rosemary	6 cc
Oil lavender	4 "
Strong ammonia solution	50 cc
Alcohol q. s. to make	1,000 "

Procedure: Heat the water and dissolve the sodium carbonate in it, add 200 cc. of alcohol and the stearic acid and continue heating until saponification takes place and effervescence ceases. Dissolve oils in 500 cc. of alcohol and stir into soap solution. Add rest of alcohol. Filter.

MUSCULAR LINIMENT

Tincture capsicum	12 ounces
Spirits of camphor	10 "
Ether	10 "
Sodium chloride	2 "
Alcohol	22 "
Oil of turpentine	1 "
Ammonia	2 "
Ammonium chloride	5 "
Water	35 "

Procedure: Dissolve sodium and ammonium chloride in water. Add the capsicum, camphor to the alcohol. Mix the two solutions and add the turps and ether. Filter.

POTASSIUM IODIDE LINIMENT

Glycerin	15 ounces
Potassium iodide	4 "
Water	5 "
Coconut oil	12 "
Oleic acid	4 "
Caustic potash	5 "
Water	20 "

Procedure: Make the soap first by dissolving the caustic in water with heat. Melt and add the oil. Continue heat until saponified. Add glycerin. Dissolve potassium iodide in rest of water, add to the soap solution and stir in for fifteen minutes while continuing heat.

BETA NAPHTHOL LINIMENT

Ether	5 lbs.
Precipitated sulphur	2 "
Beta Naphthol	6 "
Soap liniment	20 "
Glycerin	5 "
Alcohol	70 "

(*Continued on page 264*)

Tooth Pastes

There are many types of tooth pastes and many methods of flavoring them. In this article we give the ingredients and methods of manufacture of all types.

INTEREST in tooth paste as one of the staple articles of the trade continues to grow and is especially keen at this time in view of persistent rumors that the grocery chains contemplate the manufacture and sale of high grade pastes at prices heretofore unheard of. Should this development take place competition would be tremendously sharpened and established manufacturers would have to make certain that their paste actually is of the highest quality and at the same time they would have to be certain that this quality is being made at the lowest possible price.

The maker of tooth paste has an extremely wide selection of raw materials from which to draw. Among the most commonly used are the following: precipitated chalk, tri-calcium phosphate, calcium phosphate, magnesium oxide, carbonate, phosphate, hydrate, peroxide, talc, titanium dioxide, fullers earth, bentonite, wilkinite (colloidal clay), kaolin, kieselguhr, cuttlefish bone, pulverized pumice, powdered orris root, pulverized neutral white soap, calcium sulphate, calcium phosphate, potassium chlorate, salt, bicarbonate of soda, tartaric acid, citrate of soda, glycerine, honey, mucilages of tragacanth, acacia, karaya, sugar, cerelose, glucose, saccharine, starch, glycerite of starch, flavors: the oils of wintergreen, peppermint, spearmint, eucalyptus and sassafras; menthol, thymol, phenol and a host of other incidental materials. Now when you come to consider the functional structure of a tooth paste it naturally divides itself into the following categories:—

Polishing agent: (sometimes called the base since it constitutes the bulk of the paste).

Vehicle or Excipient: this imparts the necessary fluidity.

Binder: this prevents separation.

Sweetener: this imparts a pleasant character to the flavors.

(*Continued on page 262*)

Readers'

Being a department dedicated to answering the queries which come to our research department.

Face Powder Sifting

Some months ago you ran in your paper an article on face powder describing a method of manufacture employing a pulverizer and a high speed sifter. Will you advise me where to buy the necessary equipment and suggest the best method of setting it up on a one floor layout? Salt Lake City.

You are referred to THE DRUG AND COSMETIC CATALOG which contains approved listings and we recommend that you consult first the manufacturers listed in bold face type at the head of each classification. Naturally the type of pulverizer you select depends upon the number of shades powder you have. Some machines are easier to clean than others; the cage and attrition types being particularly suitable in this respect. For such an installation a layout should consist of sifter, mixer and pulverizer arranged in a row with suitable conveying devices for carrying the material from one process to another. If you sift first you will never have to clean your sifter. Then you can give the powder (together with the color and perfume bases) a preliminary mix in the mixing machine (this in order to get a rough blend, a procedure which takes ten or fifteen minutes) after which, run it through the pulverizer. Once is usually sufficient. You are referred to the discussion on material handling continued in Management Forum in the current issue.

Lotion Separation

We make a hand and face lotion containing the usual run of materials common to the so-called "honey and almond" lotions, expecting that we use carragheen instead of quince seed. For some reason we have never been able to determine, the lotion separates on aging. What strikes us as being most extraordinary is that some samples stand up for longer periods than others. The formula is enclosed and your suggestions will be appreciated. St. Louis, Mo.

Examination of your formula indicates an insufficiency of preservative for the mucilage content for one thing. There seems to be an excess of wax for another. As you sent no sample of separated lotion we are unable to examine the condition of the separated solids. If these look "spongy" and filled with bubbles the chances are that the condition is due to decomposition of the vegetable mucilages. Add from .10 to .15% of formaldehyde or parahydroxy benzoic acid. Also omit the mineral waxes; they serve no useful purpose.

Selecting Trade-Mark

We are contemplating a line of antiseptic baby products for sale in the chain stores. These will be packaged in accordance with the professional style associated with ethicals. What we want to know is, can we use a fictitious doctor's name for our trade-mark? St. Louis, Mo.

Most emphatically you can not. When a product bears a doctor's name and title that doctor must be or must have been identified with your company in some capacity. You can make some sort of arrangement with a retired physician but you can't coin a name. Since you are going to make antiseptic claims, we presume that your products will be submitted to the A. M. A. for approval. Undoubtedly they would at once demand to know the origin of the physician's name. This subject will be discussed by an authority in a forthcoming issue of THE DRUG AND COSMETIC INDUSTRY.

Deodorant Formula

Recently we read in your magazine an article on deodorants but the article did not contain any specific formulas. Will you be good enough to supply one for this purpose? Los Angeles, Cal.

Try this:

Magnesium sulphate	7	lbs.
Aluminum chloride	15	"
Oxyquinoline sulphate	8	ozs.
Alcohol	½	gal.

Water, distilled to ten gallons, perfume and color to suit.

Dissolve the aluminum chloride and the magnesium sulphate in six gallons of the water. Dissolve the oxyquinoline in the remainder. Mix the two solutions together and add the perfume and color, previously mixed with the alcohol.

Cloudy Shampoo

For some time past our olive oil shampoo liquid has become cloudy on standing. As we always filter it carefully through an asbestos disk filter we are unable to understand why this happens. We heard that you had an article on this subject but we cannot locate the issue. What puzzles us especially is that nothing ever happens to our tar shampoo. Any information you can give will be sincerely appreciated. New York City.

Undoubtedly the above condition is due to failure to chill the soap before filtration. The cloudiness is probably due to the gradual saponification of the harder soaps which takes place on standing. Chill your soap to 45° F. before filtration and you will probably have no more trouble. Try this and if the condition re-occurs send us your formula and we shall be glad to check it. The reason that you've had no trouble with your tar soap is very likely due to its dark brown color which would make cloudiness less evident than it would be in a clear olive oil soap. See THE DRUG AND COSMETIC INDUSTRY, Feb. 1932, p. 117.

Brushless Shave

We want to make a witch hazel, brushless shaving cream. Have you any information in your files on this subject? We have been subscribers to your magazine for six years and find it extremely useful. Winona, Minn.

Experiment with the following. You can adjust consistency to suit yourself by adding or decreasing water.

Stearic acid T. P.	25	lbs.
Lanolin anhydrous	3	"
Alcohol	2	"
Triethanolamine	¾	"
Borax	½	"
Glycerin	3	"
Witch hazel	34	"
Water	34	"

Melt stearic acid and lanolin to about 70° C. Heat the water, triethanolamine and borax and when it reaches the boiling point slowly pour in the stearic acid-lanolin mixture. Stir rapidly and when smooth white emulsion forms, slowly add the hot witch hazel while continuing stirring. When cream has become sufficiently cooled, add additional perfume, if thought necessary, together with the glycerine and alcohol.

Sunburn Cream

We are planning to add a sunburn protective cream to our line. What substances are generally used for protective purposes? Can you give us a formula for a vanishing cream which might be used for this purpose. Miami, Fla.

Sunburn preparations generally contain quinine bisulphate, oleate or the alkaloid, tannic acid or aesculin. Tannic acid, however, is said to be objectionable because of its tendency to react with metals as, for instance, spectacles and watches. Other authorities hold that it aids in promoting a quick pigmentation without sunburn. The following is recommended:

Stearic acid	15	lbs.
Oleic acid	5	"
Potassium hydroxide	1	"

Questions

In answering questions of subscribers we can not indulge in extensive research.

Glycerin	3	lbs.
Water	76	"
Aesculin	5	"

Melt stearic and oleic acids to 85° C. Dissolve the potassium hydroxide in water and bring heat to 85° C. Stir into the melted fats with brisk stirring. Continue for half an hour. Add glycerine and continue stirring until quite cold. Finally stir in the aesculin.

Inks on Glass

Mr. Gerald Heller of this city suggested that we write you in connection with a source for marking inks to be used on glass. Any information you can supply on this subject will be appreciated. Baltimore.

An extraordinary amount of interest was awakened in this subject following the publication in Management Forum of the claims of a certain well-known ink maker. Unfortunately these claims were not substantiated by performance and although we have since examined a great many so-called etching inks we have found none that will endure. White etching inks are simply hydrofluoric acid applied with a metal stamp. Sorry we have no reliable source for a colored etching ink.

Shaving Cream

Our shaving cream is giving us a good deal of trouble. It seems to assume a light brown color and besides some of it is spongy which makes it very stringy and difficult to squeeze out of the tube. Will you inspect the enclosed formula for us, please? We have been unable to find anything wrong with it. Kansas City.

Your formula is a good one. There isn't anything wrong with it. The conditions you describe point to two things: the brownish discoloration indicates iron contamination, which suggests that you are not using an enamel or glass lined mixing tank or else that the lining of your mixer has been chipped off. The sponginess is due to too rapid mixing and the consequent incorporation of air. Usually the sponginess disappears if the cream is allowed to age for three or four days—or you can get rid of it by running the cream through a roller mill. We'd appreciate hearing from you again if we are wrong in our assumptions.

No License

We are about to market a new proprietary remedy and would like to know where we should obtain a license to do so? Memphis.

No license is required except from the Board of Health of New York City. You are at perfect liberty to market your product in other places throughout the country without a license, but if it is found to violate the Federal Food and Drugs Act, or the health laws of any of the States, your product is liable to seizure, and you are liable to fine and/or imprisonment.

Not U. S. P.

We are marketing a proprietary remedy which contains many ingredients which are not mentioned on the label. Must these ingredients be U. S. P.? New York.

No. Unless you mention the names of ingredients of proprietary remedies on the label, they need not be U. S. P. In many proprietaries, the desired action would not be obtained by the U. S. P. product—white phenolphthalein for example.

Depilatory Package

Our depilatory package is giving us a vast deal of trouble owing to the discoloration of the labels. What can be the cause of this condition? Montreal, Can.

Very likely your label stock is made of cheap sulphite paper which is subject to attack by the common run of depilatories. Sometimes a similar sensitivity is noted when the printing inks contain lead or antimony which slowly react with the sulphite paper causing a black discoloration. In packaging depilatories of any kind be sure that each package is wiped with the utmost care before labeling.

Astringent Lotion

We have had considerable trouble with our astringent lotion due to the formation of a hard crystalline substance about the corks. How can this be overcome? our formula herewith. New York.

An examination of the formula discloses an excess of magnesium sulphate which crystallizes out on standing. Reduce the amount used by thirty per cent.

Liniment Formula

In this locality we seem to have an excellent market for a good all-purpose liniment. Have you any suggestions to make that will help us out? Calgary, Can.

Try the following:

Oil of sassafras, oil of cedar leaf, oil of hemlock, oil of wintergreen,—of each four ounces. Mix and add the following:

Chloroform	25	ounces
Alcohol	185	"
Spirits of ammonia	30	"
Spirits of camphor	30	"
Tincture of capsicum	30	"

Add the oils to the alcohol, mix in the tinctures and the chloroform.

Label Adhesives

We've had a great deal of trouble with labels. They don't seem to stick. Can you recommend a good adhesive for machine labeling? Albany, N. Y.

It would be better for you to go over this matter with the maker of your labeling machines. Usually each maker approves a certain glue with which he has had satisfactory experience. But it is not always glue that causes this condition. Are you sure that your paper stock is not too heavy? We recommend a stock either super calendered or single coated not in excess of 55 pounds for the best results.

Crude Drug Extracting

Among our products we have a cough syrup which contains several crude drugs which we must first extract. For many years we noticed that we could never get on a large manufacturing scale the same strength of extract that we get in the laboratory. We have been using gravity percolators but we understand that there is a method of extraction which gets all the extract and that this method or machine was described in your publication. Can you give us some information of this subject? Cincinnati, O.

We refer you to the March, 1931 issue of DRUG MARKETS, page 271 which contains an article on the subject by Mr. Chilson. The method recommended calls for the use of a vacuum mixer. The pulverized crude could be dumped into this without premoistening, after which the solvent could be added and the machine started. The agitator would keep the menstruum working through the crude thus exposing all the particles of the drug to the solvent action of the menstruum. In due time the extract can be pumped off and fresh menstruum added so as to thoroughly exhaust the crude. Then this too could be drawn off and the vacuum pump started so as to recover the menstruum from the spent dregs. Thus, in one piece of equipment all the operations could be carried out. Since the publication of Mr. Chilson's article, Max Techow & Co., of Hamburg, Germany and Strong Cobb & Company of Cleveland have written in to state that they have used the method with eminently satisfactory results. The former employs a vacuum mixer, the latter a rotary vacuum drum.

What's New in Medicines

Still more combinations of drugs are offered in foreign markets for treatment of human ills. These preparations continue to point the trend of therapy abroad.

Arsotal—Pills. Contain arsenic, iron, strychnine, guaiacol and gentian. Laboratorium Hygeia Klausenburg, Austria.

Ilon-Pasta—Alkaline paste, containing aluminum and zinc compounds. Used for treating skin irritations connected with formation of acid. Ilon Export A. G., Zuerich, Switzerland.

Ipecodal—Tablets. Contain codeine, acetylsalicylic acid and powdered ipecac. For grippe, bronchitis and similar diseases. Laboratorium Hygeia Klausenburg, Austria.

Pulmorobin—Contains aconitine, codeine, guaiacol, potassium sulfoguaiacolate, calcium glycerinophosphate, calcium lactophosphate, extract of cinchona. Expectorant. Same maker.

Psicain-Neu—Benzoyl-4-ecgonin-normal-propyl ester hydrochloride. White or slightly colored crystalline powder, soluble in 3 parts water and 6 parts alcohol. Aqueous solution turns blue litmus paper red. Bitter-tasting. Indicated as substitute for cocaine where latter is used for superficial anaesthesia, such as treating mucous membranes of mouth, nose, throat, nasal passages and eye. Valugle as superficial anaesthetic in odontology. Anaesthesizing action is 5 to 10 times greater than that of psicain or laevo-cocaine. Drug is well borne by system in all cases. No secondary reactions are observed. Not habit-forming. Used in eye in 1% solution; for throat, ear and nose in 2% solution. Concentration is 0.1 to 0.2% in anaesthesia of urinary tract. E. Merck, Darmstadt, Germany.

Arsenos-Solvant—Contains 0.5 gram of chloretone, 0.5 gram of guaiacol, 5 grams of glucose and distilled water as required up to 100 cc. Used as solvent for arseno-benzene. Laboratories de Biochimie Medicale, France.

Lizesan-Wein—Liquid containing cola extract, sodium glycerinophosphate, extract of cinchona bark and Malaga wine. Strengthening agent and tonic. Einhom Apotheke, Frankfurt-am-Main, Germany.

Loruderm—Light brown salve. Contains cyclo-oxy acids in combination with hydrogenated hydrocarbons with addition of mercury-ammonium chloride, bismuth subgallate, ethyl ester of phenylacrylic acid. Pasty consistency. For chronic and acute eczemas, seborrhoic eczema, interdigital eczema, neurodermitides, acne, sykosis, herpes, dishidriotic eczema, dermat. ex fol. (intermittent) eczema caused by incorrect nutrition, dermatoses after operations, occupational eczemas, ulcerated eczemas of lower legs; contra-indication, after radium irradiating salve has been used, it must not be directly applied. In porcelain jars containing 30, 50 and 250 grams. L. Geissler Chemische-Pharmazeutische Laboratorium, Westerholt in Wuertemburg, Germany.

Maltrano—Yellow brown emulsion with pleasant odor in flasks containing 350 or 180 grams. For scrofula, rickets, tubercular diseases, anorexia, general conditions of debility, particularly after severe diseases and operations. Dose for adults one tablespoonful 2 to 3 times daily; children one teaspoonful 3 times daily. Dr. Behre & Co., Bremen, Germany.

Medarkan—Capsules (gelodurat) in metalic boxes containing 30 or 100 capsules. Contains laxative and diuretic, aloes, arnica flowers, absinthium, valerian root, caraway seed, garlic. For heart troubles due to intestinal fermentation, large intestine insufficiency and general intestinal troubles. Prophylactic and medicament for hardening of arteries by preventing metabolic poisoning. Dose one capsule with water 3 to 4 times daily, half hour before meals. Vereinigte Gelatinkapsel Fabriken Pohl and Lehmann G.m.b.H., Marienburg, Germany.

Medicinal Taubert—Fine crystalline powder, 10 grams in aluminum tubes. Contains ammonium salicylate. For fever-producing diseases, grip, headaches, rheumatism, gout, sciatica, etc. Apotheker A. Taubert, Elberfeld, Germany.

Menth-Ocomp—Brownish salve in tubes. Contains 5 to 15% menthol or methyl salicylate, extract of capsicum in ether, a suitable salve base. For rheumatism and neuralgic diseases. Dose 3 times daily rubbed into affected part. Aktiensgesellschaft fuer Medizinische Produkte, Berlin, Germany.

Nedalin—Tablets containing pulverized garlic. For arterio-scherosis, hypertonia, diseases of heart, liver and kidneys. Neda Werk Eduard Palm, Nuernberg, Germany.

Abszessin—Brownish pink tablets. Contain 0.4 gram bismuth sulfide, 0.03 gram of albumen proteinate, 0.02 gram of phenol, 0.4 gram of glycose, 0.1 gram of cocoa and 0.05 gram of aromatic substances. Used as antiphlogistic and specific in treating staphlococci and streptococci infections. Stimulates leucocytoses and enhances rapid formation of anti-bodies, such as antitoxins, lysines, agglutinates, etc. Indicated in inflam-

(*Continued on page 268*)

BEESWAX

T.L.

100% PURE WHITE UNIFORM *ALWAYS!*

The quality of beeswax used is the most important single factor in the success of a cold or cleansing cream. A high quality of beeswax is also of considerable importance in the manufacture of vanishing creams, tissue creams, and practically all types of cosmetic creams. That is why the successful manufacturer refuses any compromise on beeswax quality—he specifies the T. L. Brand.

The high melting point and character of T. L. PURE WHITE BEESWAX impart to the product a very high emulsion value. This property enables the cream manufacturer to use less beeswax in the preparation of the cream with the assurance that the emulsion is permanent.

THEODOR LEONHARD WAX CO., Inc.

Haledon, Paterson, N. J.

WESTERN DISTRIBUTOR: A. C. DRURY & CO., 106 E. AUSTIN AVE., CHICAGO

The Compounders' Corner

Whitening of Chocolate Covered Pills

A white coating sometimes appears on chocolate covered pills. Investigation has shown that this is due to fact that the base, that is the chocolate coating mixture has not been properly prepared. Absence of sirup in mixture is claimed to be main fault. When sirup is not used in making composition, sugar does not stand up. Moisture is absorbed by dry sugar in mixture immediately and sugar mixes wet with the pill and does not dry on surface. This has bad effect on color of chocolate coated pill. Grayish color of chocolate is assigned thereto. When about 45% of sirup is added, chocolate coated pills do not whiten. Another investigation assigns graying or whitening of chocolate coated pills to presence of cocoa butter in chocolate. The less the cocoa butter content of the chocolate and the less other fatty substances, such as ground nuts, contained in it, the less tendency, it is claimed, the chocolate has to whiten. Whitening effect can also be prevented by application of chocolate varnish to pills. A varnish that does not taste bad is made from equal parts of tincture of benzoin and alcohol with addition of 2% of vanillin.

Physiological Action of Cholesterin

Increasing importance of cholesterin as an ingredient of hair lotions and other preparations to be rubbed into skin has given rise to certain investigations regarding physiological action of cholesterin on human system. Experiments were made with salve containing 10% cholesterin and 5% oil of turpentine. This salve was rubbed into rabbits and found to cause severe arterio-sclerotic changes in arteries. Certain unfavorable conclusions have been drawn from these experiments and given extensive publicity. Additional studies by other investigators have shown that physiological action of cholesterin is by no means a simple matter and that it is not at all certain that results obtained with animals are duplicatable in human beings. There may be certain people who are peculiarly sensitive to cholesterin but evidence points only to rare instances. There is no evidence whatsoever that cholesterin salves produce cancer or promote cancerous growths. Observations made in a large plant which recovers lanolin and other cholesterin-containing fats have shown that no cases of skin cancer or arterio-sclorotic effects result from cholesterin when these substances are handled by workers over long periods of time. There should be no fear, it is claimed, of using cholesterin in cosmetics.

Eau De Cologne in Stick Form

Stearin soap or rosin soap may be used as base in these preparations. For example 8.5 grams of stearic acid are dissolved with gentle heating in 50 grams of alcohol, and 1.3 grams of caustic soda in 40 grams of alcohol. The two solutions are united and heated gently until mixed solution becomes clear. Then required quantity of eau-de-cologne essence is added and mass is poured into suitable molds. In another process 4.5 grams of stearin are melted and mixed with 0.5 gram of sodium carbonate and 95 grams of eau-de-cologne. Mixture is heated for hour in autoclave and poured into molds after cooling. Preparation can be made by adding 20% of pulverized rosin soap to eau-de-cologne which contains 1% menthol.

An interesting substance for gelling alcohol is potsasium diacetone-frutose-sulfate, only 2% being required. If larger quantities are used, mass becomes gelatinous. This solidified alcohol can be readily perfumed with essence of eau-de-cologne as well as with other essential oils. Another process depends on use of calcium acetate. If 15 parts of commercial calcium acetate are added to 85 parts of alcohol with strong agitation, the alcohol solidifies almost instantaneously to a mass of consistency of soap and can be removed from mold by simply turning mold upside down. When alcohol is first perfumed with essence of eau-de-cologne, latter is obtained in solid form. Advantage of this solid eau-de-cologne is that it does not contain soap or solid carbon and hence does not soil clothes.

White gelatin, that is gelatin containing zinc oxide or titanium dioxide, may also be used. For example, 150 grams of white gelatin are mixed with 750 grams of hot water and allowed to stand 24 hours. Then 50 grams of 28° Be. glycerin, in which approximately 1.5 to 2.5% of essence of eau-de-cologne and approximately 0.5 to 1% of recrystallized menthol have been dissolved, are added to gelatin solution. Mixture may be preserved by addition of small proportion of hydroxybenzoic acid ester. Best grade of paraffin wax may also be employed. For example, 1,000 parts of wax are melted on water bath at gentle heat. Approximately 20 to 25 parts of essence of eau-de-cologne and 0.5 part of menthol are dissolved in melt and after mixture has been vigorously agitated it is poured into sticks.

Medicinal Bath Essences

Methyl calicylate is contained in these preparations. Emulsions are obtained with them in which salicylate is very finely distributed. Methyl salicylate is worked up to a clear aqueous solution with sulfonated castor oil, glycerin and potassium carbonate. Solution remains clear on standing and does not separate into its constituents part. Milky emulsions obtained with this solution remain stable for long time. An example of composition of solution is as follows:—150 parts sulfonated castor oil, (95 to 96% concentration), 150 parts methyl salicylate, 45 parts eucalyptus oil, 5 parts menthol, 45 to 50 parts potassium carbonate, 100 parts glycerin and 500 parts water. Glycerin in this solution has potent action in giving clear solution and an absolutely stable emulsion with water.

Flavors in Dentifrices

Flavors or aromatic substances for tooth pastes and other dentifrices include essential oils, pulverized botanicals aqueous or alcoholic drug extracts and various plant extracts. Correct choice requires considerable practice. Peppermint oil is largely preferred in this country and in most European countries. It is preferable to oil of wintergreen for this purpose. While most of the essential oils possess certain disinfectant action, their short contact with the tissues of the mouth and the teeth renders this unimportant. Astringent and tonic plant extracts are frequently used. Those recommended are extracts of cinchona bark, tormentilla root, mastic, kino, pomegrante shell, sage, scurvy grass, catechu, galangal, myrrh and red sandalwood. Their action depends largely on the tannin content. Pure tannin may also be used. Orris root is also useful. Saccharin is preferred for sweetening.

Skin Protecting Cream

Cream consists of a pasty emulsion containing small quantities of fatty substances with concentrated solutions of soap and emulsifiers of vegetable origin in water. According to recent German patent, 19 parts soap, 4 parts gum arabic, 2 parts lanolin, one part glycerin and 74 parts water are mixed together. Soap and gum arabic are first separately dissolved in water. Two solutions are then united with agitation and oily ingredients added. Mixture is shaken constantly until homogenous product is obtained. Glycerin may be added during shaking process. Other water-soluble emulsifiers may be used in place of gum arabic. For example, dextrin also gives good results. Lanolin may be replaced by petrolatum. Same proportions of these substituents are used as in above formula. A pasty emulsion is obtained from 15 parts soap, 6 parts dextrin, 3 parts petrolatum, one part glycerin and 75 parts water.

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344

This Stearic Acid has THE LOW IODINE VALUE OF UNDER 1.0

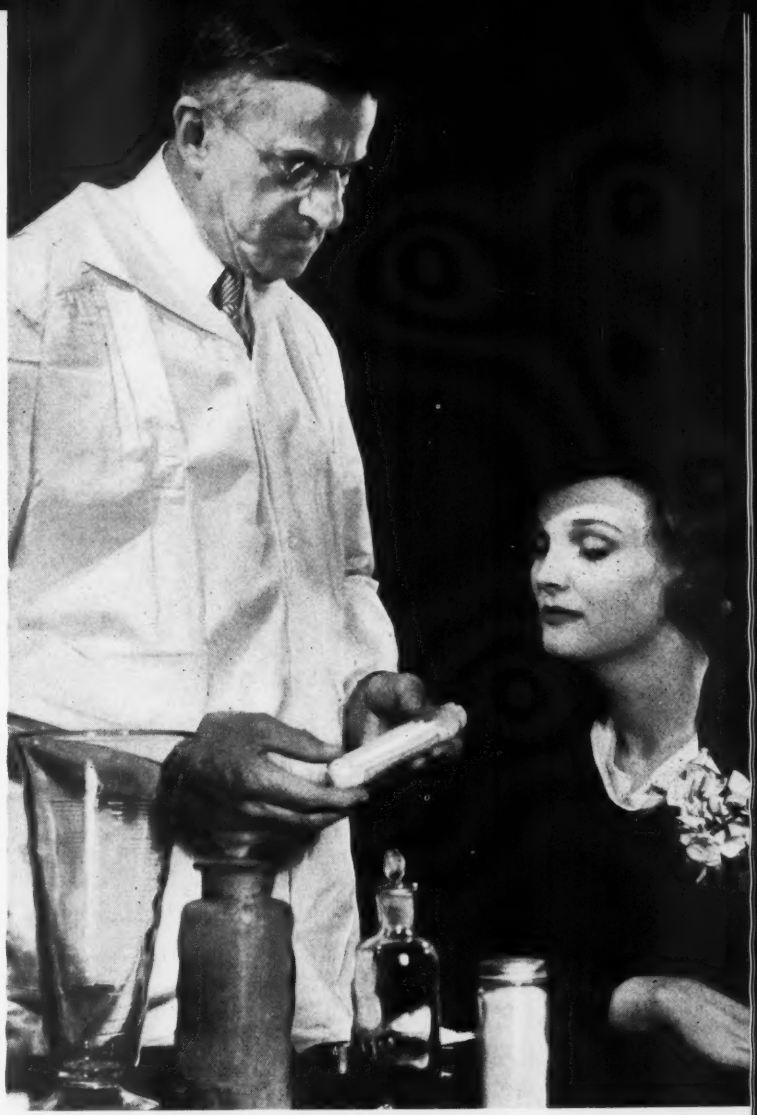
Hydistear represents the very finest grade of Stearic Acid ever produced. It is manufactured exclusively from animal fats. Never before has any commercial grade Stearic Acid had so low an iodine content as 1.0; nor has any Stearic Acid before ever shown the high melting point of Hydistear—139° F. You are invited to study the certified analysis of Hydistear, presented below. Yet, in spite of its quality, the price of Hydistear is well in line. Inquiries are invited.

WILL & BAUMER CANDLE COMPANY, Inc.
17 East 32nd Street, New York

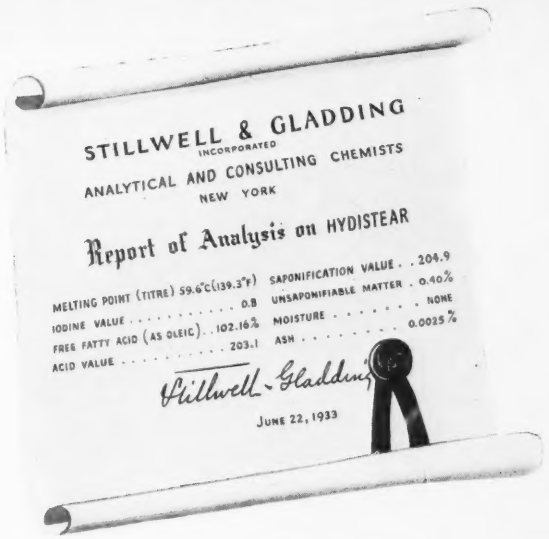
HYDISTEAR

Hydistear Manufactured by Will & Baumer Exclusively

(PAT. APPLIED FOR)



HYDISTEAR ANALYSIS



STILLWELL & GLADDING
INCORPORATED
ANALYTICAL AND CONSULTING CHEMISTS
NEW YORK

Report of Analysis on HYDISTEAR

MELTING POINT (TITRE)	59.6°C(139.3°F)	SAPONIFICATION VALUE	204.9
IODINE VALUE	0.8	UNSAPONIFIABLE MATTER	0.40%
FREE FATTY ACID (AS OLEIC)	102.16%	MOISTURE	NONE
ACID VALUE	203.1	ASH	0.0025%

Stillwell-Gladding

JUNE 22, 1933

Other products:

STEARIC ACID (double and triple pressed) • RED OIL • BEESWAX

Magnesia Tooth Powder

With the return of tooth powders to an even greater popularity, the following formula for a magnesia tooth powder may be of interest: Magnesium carbonate, 150 oz.; Magnesium hydrate, 600 oz.; Precipitated chalk, 250 oz.; Wintergreen oil, 8 oz.; Eucalyptus oil, 3 oz.; Saccharine, 1 oz.

Face Powder Base

General Drug Co. is introducing a new powder base called "Face Powder Base Z." Ten or fifteen per cent. added to a face powder formula is said to give the resulting powder added smoothness and slip, finer texture, greater adherence, and greater covering power. The new base is a single chemical body and has been subjected to thorough tests here and abroad which have demonstrated its effectiveness.

A Better Stearic

Will & Baumer Candle Co. has developed and perfected a stearic acid, designated as "Hydistear," which, it is said, is the most nearly perfect stearic acid to use as a base for vanishing creams, shaving creams and toilet soaps. The new product is made exclusively from animal fats and has a high melting point of over 139° F. and an iodine value of under 1.0. Other specifications are free fatty acid, 102.16%; acid value, 203.1; Saponification value, 204.9; unsaponifiable matter, 0.40%; moisture, none; ash, 0.0025%.

Skin Oils

Skin oils for massaging and for protecting skin against sun's rays, it is claimed, should not contain mineral oil. Base of these oils should be vegetable oils, such as olive oil, peanut oil, and walnut oil. Skin oils, which are rubbed into the skin by massaging, should preferably contain lemon oil, lavender oil, oil of bergamot, pine needle oil or methyl salicylate. These substances promote circulation of blood through skin. About 5% of Siberian pineneedle oil or methyl salicylate is generally used, and it is immaterial whether this proportion is made up solely of either one of the substances or of their mixture. A chamomille salve, which prevents inflammation of skin due to too strong sunlight because of its content of chamomille oil, is obtained by adding ½% of blue chamomille oil to fatty oil base. Fat-soluble chlorophyll may be used for coloring. An olive oil preparation can be obtained by heating 900 parts of olive oil and shaking with 100 parts of freshly cut lemon peel and allowing mixture to stand for eight days in well-closed vessel in warm room. Oil is then poured off from lemon peel, the latter are pressed and oil filtered clear. It is then filled into bottles ready for use. If lemon peel does not yield sufficient oil, a little pure lemon oil may be added. Odor of this product is distinctly and refreshingly lemon and color is yellow.

Viscosity of Mineral Oil Preparations

Admixture of hydrocarbons of oily character, such as mineral oil, with essential oils, such as lavender oil, are used in cosmetics. Small addition of essential oil reduces viscosity of preparation materially. This property is important in affording preparation which is rapidly absorbed by skin without making it greasy. Other substances have also been found to have same effect, provided they and the mineral oil, for example, are mutually soluble in each other. Thus the viscosity of the oil may be reduced by addition of hydrocarbons, such as benzene, and its homologues: benzene and its homologues; benzyl benzoate, thymene and like. About 5 to 10% are required to give desired results.

Beta-Naphthol in Hair Lotions

Beta-naphthol is effective in removing dandruff. Alpha-naphthol must not be used as it is highly poisonous. Concentrations as low as 0.25% of beta-naphthol are effective and more should not be used. Thus 2.5 grams of beta-naphthol and 10 grams of Portugal-hair lotion perfume are dissolved in 650 grams of alcohol and then 340 grams of distilled water are added. Perfume composition contains 750 grams of easily-soluble Portugal oil 50 grams of, aurantin, 100 grams of linalyl acetate, 50 grams of terpeneless lemon oil and 50 grams of white, rectified orange oil.

Borax in Cleansing Creams

Poor results are often obtained with these creams when too little borax is employed. Another important matter is to secure thorough mixing which is obtained by heating the stearin, spermaceti and refined petrolatum to 80° C. on water bath and then emulsifying with hot borax solution and stirring until mixture cools.

Creamy Cocoa Butter

Cocoa butter can be prepared in form of a cream by melting with benzoinated olive oil or peanut oil. Pure olive and pure peanut oil may also be used. In such cases the cocoa butter cream is best preserved with methyl parahydroxybenzoate, about 2% being used. The preservative need not be used when the cocoa butter is mixed with mineral fats. For example 300 parts cocoa butter and 300 parts yellow beeswax are melted together and gradually mixed with constant agitation with 1,000 parts of mineral oil. Other compositions contain 250 parts coconut oil, 750 parts benzoinated lard, or 600 parts coconut oil and 300 parts peanut oil and 100 parts white beeswax. Consistency of product is well controlled by regulating proportion of liquid ingredients.

Shellac Coating for Tablets

Shellac coatings for tablets, pills and capsules are made in such manner that shellac does not dissolve in stomach and thus release medicaments, but passes through unchanged and first dissolves in intestinal juices. Furthermore, coating is made is such manner that it has no dangerous physiological action on human system. This is accomplished by dissolving shellac in a mixture of equal parts of ammonia and alcohol. Shellac apparently undergoes decomposition when dissolved in ammonia. The alcohol in mixture is added merely to hasten evaporation and prevent penetration of coating into tablet, pill or like. Pure bleached shellac in flake form free from arsenic must be used. A 25% solution is preferred.

Discoloration of Sterile Quinine Solutions

A bluish or greenish color is sometimes observed in quinine hydrochloride solutions, which may contain urethane or not and which have been prepared in sterile form. This is due to traces of copper. In one instance where the sterile solution was made from absolutely pure quinine hydrochloride and redistilled water it was concluded that the color was due to the urethane present. Water containing copper salts may also be responsible.

Decolorized Tincture of Iodine

Sodium thiosulfate is usually employed as active ingredient causing discoloration of tincture of iodine. Care must be taken in making solution of iodine and sodium thiosulfate in water that solution is completely cooled before ammonia is added. Otherwise two layers will be formed. Heavier layer will then contain aqueous solution of sodium tetrathionate and a little sodium thiosulfate, and lighter layer will consist essentially of esters.

Colors for Sunburn Salves

Correct color in artificial sunburn preparations is obtained with mineral pigments. For example a brown shade is obtained by mixing together 30 parts light-colored ocher, 40 parts dark-colored ocher and 40 parts burnt sienna. Other combinations are 25 parts dark-colored ocher, 25 parts light-colored ocher and 50 parts burnt sienna, or 80 parts gold ocher and 20 parts umber brown. Flesh tints are obtained with mixture of 4 parts carmine and 24 parts gold ocher, or 100 parts Armenian bole, or 32 parts gold ocher and 8 parts alizarin-madder lake. Pigments must be mixed very thoroughly and must be in very fine powder state.

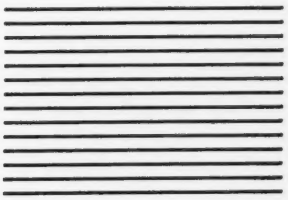
Rose compositions are acknowledged to be the most versatile of all odors. If you are interested in creating a Rose compound or Bouquet embodying certain characteristics of the Rose odor, we would suggest ascertaining the merits of the following:

Rose Aldehyde F.
Citronellol
Geraniol Extra
Phenyl Ethyl Alcohol
Otto of Rose
Geranium African
Geranium Bourbon
Resin Labdanum
Rhodinol 100%

ROSE

If you are more particularly interested in a certain type of Rose compound in finished form, you will undoubtedly find one of the following leaders of interest:

Red Rose Supreme
Rose Flower A.
American Beauty Rose A. D.
Rose Petals D.
Rose d'Aout



COMPAGNIE PARENTO, Inc.

EXECUTIVE OFFICES AND LABORATORIES
CROTON-ON-HUDSON, N. Y.

NEW YORK
507 FIFTH AVENUE

TORONTO, ONT.
73 ADELAIDE ST., W.

They must be screened and passed through hair sieve at least once.

Bear Grease in Cosmetics

Bear grease is not easily obtainable, but it has been claimed to possess even greater advantages than lanolin for making certain skin foods and creams, particularly those of newer type containing hormones. It is also reported that a good imitation of bear grease is obtained by mixing veal suet and beef marrow, which can be perfumed as desired and put up as a pomade or in sticks. Formula calls for 4 ounces beef marrow, 2 ounces veal suet, one ounce lard, 2 drams sassafras oil, 15 minims lavender oil, and 2.5 minims cedarwood oil in making pomade. When stick form is desired, 2 ounces of ceresin wax or other wax are added. Extract obtained by digesting walnut leaves, fresh spinach, oil soluble chlorphyll or oil soluble dyestuff may be used to color preparations.

Isopropyl Alcohol in Hair Preparations

Isopropyl alcohol is used as substitute for ethyl alcohol. Various advantages are claimed. For example, bay rum can be made by dissolving 0.15 part of bay oil, 0.05 part of pineto oil and 0.05 part of ethyl acetate in 45 parts of isopropyl alcohol. Then sufficient distilled water is added to make 100 parts in all. Quinine hair tonic may be made by dissolving 0.25 part quinine hydrochloride, 0.7 part bergamot oil, 0.2 part lemon oil, 0.2 part lavender oil, 0.2 part petit grain oil, 0.1 part vetivert oil and 2.0 parts glycerin in 50 parts isopropyl alcohol and adding sufficient orange flower water to make 100 parts in all. After ingredients have been thoroughly mixed, mixture is allowed to stand for few days and then filtered through talc.

Cholesterin hair tonic is made by dissolving 0.4 part of cholesterin in 4.0 parts of purest grade of carbon tetrachloride. Then this solution is mixed with 52 parts of isopropyl alcohol. While mixture is being stirred 3.0 parts of glycerin mixed with sufficient orange flower water to make 100 parts in all are added. Then 0.5 part lavender oil, 0.2 part rosemary oil and 0.2 part bergamot oil are added and allowed to stand for some time. Then mixture is filtered and bottled. Quinosol hair tonic is made from 0.1 part quinosol, 0.3 part lavender oil, 0.5 part phenylethyl alcohol, 0.1 part bergamot oil, 0.1 part benzyl acetate, 0.01 part coumarin, trace of tartrazin yellow, 40 parts isopropyl alcohol and water to make 100 parts in all. Capsicum hair tonic is made from 1.5 part tincture of capsicum, 0.2 part rosemary oil, 45 parts isopropyl alcohol and sufficient distilled water to make 100 parts in all.

Glycerin Gels

Glycerin gels are made with gelatine, starches or gum tragacanth. Agar-agar is sometimes used for same purpose. Main requisite of glycerin gels is that they should stick to hands as little as possible. Starches and gum tragacanth are more effective ingredients of the glycerin in this respect than gelatin, as latter is naturally very sticky. Honey and sugar are also sticky and inasmuch as they do not improve glycerin gels in any important way, they are better omitted. Preservation of glycerin gel is very important, as preparation is very good medium for growth of molds which quickly decompose and spoil product. Methyl paraoxybenzoate is very effective as preservative; it has neutral reaction and can be used in 0.05% solution in hot water.

While addition of honey and sugar to gel is not recommended, they are used in such compositions, containing 20 parts gelatin, 25 parts honey, 400 parts glycercin, 550 parts water, 0.5 part methyl paraoxybenzoate, 1 part formaldehyde (33% strength) and 10 parts perfume bouquet. Gelatin, honey and methyl paraoxybenzoate are dissolved in water with heating, glycerin is then added. Mixture is passed through cloth to remove lumps. It is then stirred until it has cooled off half-way and it is perfumed. Rose and violet perfumes are preferred. Formaldehyde is added last and preparation is then filled into tubes.

Mixtures of starches, such as wheat starch and rice starch, and gum tragacanth are also used. Composition contains 10 parts wheat starch, 15 parts water, 100 parts glycerin, 5 parts alcohol and 2 parts gum tragacanth. Wheat starch is first mixed with water and glycerin added. Later gum tragacanth, mixed with alcohol, is added. Mixture is heated until it no longer reeks from alcohol and translucent gel is obtained. Operation is best carried out on water bath. Process may also be carried out over open flame, but care must be taken to control latter so that preparation is not burnt. Less glycerin should be used when preparation is intended for cosmetic purposes.

Thus, a cosmetic mixture may contain 5 parts wheat starch, 5 parts water, 65 parts glycerin, 1.5 parts gum tragacanth, 0.075 part methyl paraoxybenzoate, 5 parts glycerin and 75 parts water. Wheat starch is mixed with water and glycerin is added. Then gum tragacanth and methyl paraoxybenzoate are mixed together and triturated with glycerin. Then water is added in portion with stirring. Rapid thickening takes place. Mixture is stirred until it becomes homogeneous and then more water is added and operation is repeated until all water has been mixed in. This cream is then mixed with starch-glycerin preparation and heated until fine gel is obtained which is filled into tubes. In place of finely pulverized gum tragacanth the latter in sticks is allowed to swell in water and swollen product worked into preparation. In this case the methyl paraoxybenzoate is first dissolved in alcohol and solution added.

Soluble Silicic Acid Compounds

Colloidal silicic acid in glycerin, which is soluble in water, is prepared in such manner that finished product contains 5% silicate. This preparation is a water-white, syrupy liquid. It is used for cough syrups by mixing with 50% syrup and suitable aromatic and other substances. Taste of preparation can be controlled so that it does not tire user. Addition of 0.5% of bergamot-pear ether is useful. It is difficult to make mixture of potassium sulfoguaiacolate and soluble silicic acid which remains clear for any length of time and does not gelatinize. Tetraglycol-ortho-silicate may be used for this purpose. It is a light yellow liquid containing 18 to 20% silica and 10% alcohol. This compound slowly gives a precipitate in water, but it is soluble in all proportions in alcohol. Hence it is well to use large proportions of alcohol in making preparations containing it.

Preservative for Haemoglobin Mixtures

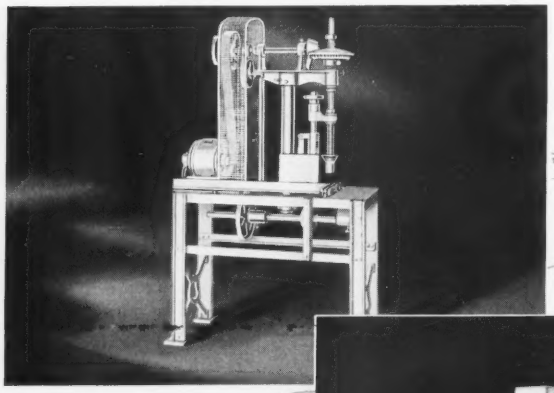
Alcohol and glycerin are mostly used for this purpose. A maximum proportion of glycerin is 25%. An ideal preservative is also claimed to be esters of parahydroxybenzoic acid. About 10% alcohol and 10% glycerin is a good mixture. Tests should, however, be made on a small sample of the haemoglobin to determine maximum allowable alcohol content of preparation. One formula calls for 333.3 parts liquid haemoglobin, 50 parts alcohol, 50 parts tincture of cacao and 135 parts simple syrup, 431 parts water. Preparation is more stable when small proportion of glycerine is added.

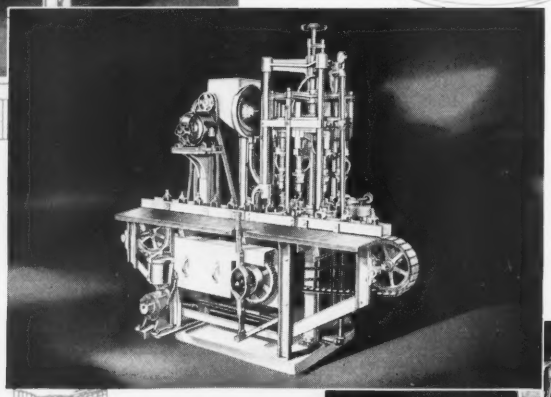
Isoamylhydrocuprein in Salves

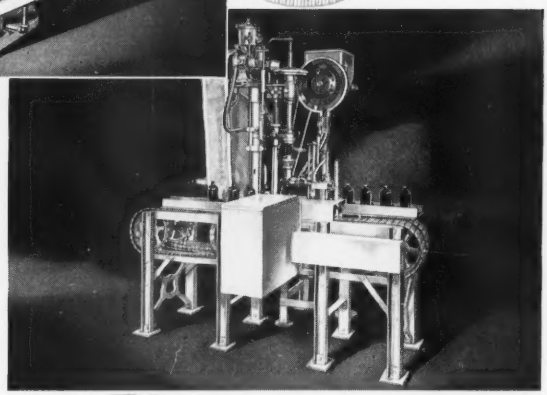
This substance is a white, almost colorless powder, which is insoluble in water and benzene, but soluble in alcohol, ether, chloroform, hot oils and fats. Substance dissolves in acids to form salts. Acid hydrochloride derivative is obtained in form of fine, colorless needles, which have bitter taste and are soluble in 15 parts of water as well as in alcohol. The substance, isoamylhydrocupreine, is pharmacologically like quinine. Its first use was as an antiseptic in treating wounds. Good results have been obtained in treating abscesses, also carbuncles and boils. Solutions are used for this purpose. In form of 2% salve it is also used as antiseptic and anaesthetic in treating second degree burns. It is also used for various skin diseases.

PACKAGING DRUGS AND COSMETICS

A SECTION OF
"THE DRUG AND COSMETIC INDUSTRY"







Since 1918

MORE THAN 350 U. S. CAPPERS HAVE BEEN PUT INTO OPERATION

All U. S. Cappers are built to perform your individual tasks in the most efficient and economical manner possible over a long period of time. Whether you use composition caps or metal, with continuous thread, duplex, or Amerseal finish, U. S. Cappers are the logical choice for your plant.

All U. S. Cappers incorporate in their design the adjustable friction tension feature. Available in hand tightening or capping units to fully automatic machines. U. S. Cappers were the first to apply molded or Bakelite caps, handling them automatically without marring or breaking at high speed. If yours is a capping problem, there is a U. S. Machine especially adapted to your needs.

U. S. BOTTLERS MACHINERY CO. INC.

4015-31 No. Rockwell St. · · · · Chicago. Ill.

Washing, Filling and Bottling Equipment

"So he wants to talk about closures, does he? Now listen, Miss Schnitzelbaum, let me tell you for the last time that I won't see *anybody* until I get some of these *important* things settled."

● The trouble is that some of those codes and things that Mr. Blivitz is worrying about never will get completely settled—at least not for a long time. He wants to get the business back on its feet before he takes up a *little detail* like a closure.

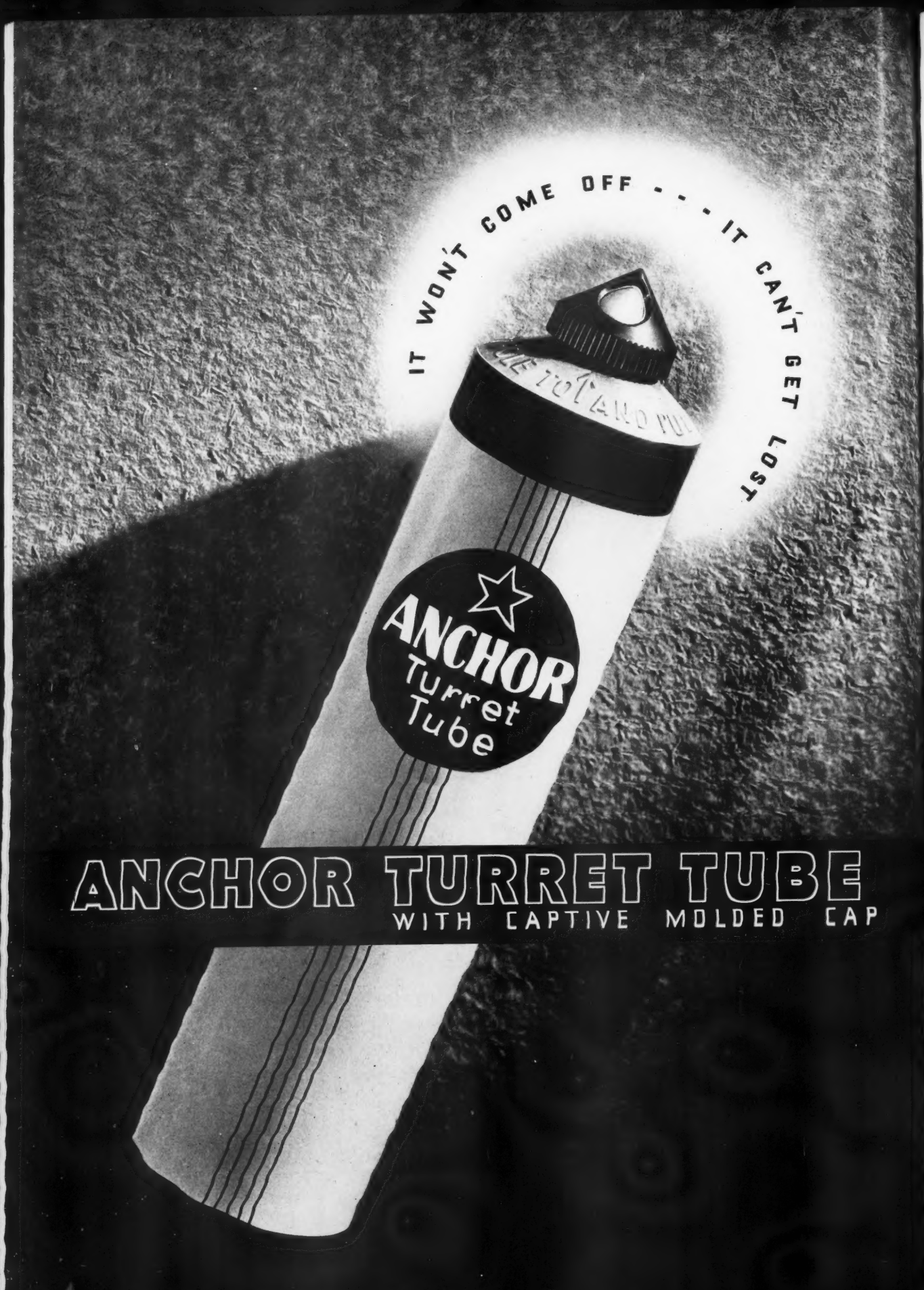
A little detail? The strange fact is that in many, many cases this little detail is actually of more real basic importance and is more urgent than anything else that could possibly occupy his time. The wrong type of closure strikes at the very heart of a business—it may affect product quality, injure consumer good will, prevent resales, act as a drag on sales activity, cause dealer dissatisfaction, and result in complaints, returns and losses.

The bright side of the picture is that the adoption of the proper type of closure—one that gives full protection, that is good-looking, and that helps sales—is an equally positive factor in creating good will and building a permanent customer following.

★ ★ ★

Anchor is well qualified to recommend the exact type of closure that best fits your package and your merchandising conditions. Our nineteen different styles and types of closures makes it possible to supply the type you need without fear or favor.

ANCHOR CAP & CLOSURE CORPORATION
Long Island City, N. Y. · · · Toronto, Canada
BRANCHES IN ALL PRINCIPAL CITIES



ANCHOR TURRET TUBE

WITH CAPTIVE MOLDED CAP

WHY IT *Helps* SALES

THE FIRST INCH of the product that comes out of an Anchor Turret Tube is fresh as a daisy; as moist and as creamy, as clean and as antiseptic as the maker wants it to be. Why? Because these tubes are hermetically sealed at *both* ends. The top of the tube has no open aperture—just a thin spot that the user punctures with a puncturing peg supplied—an easy, simple thing to do.

SIMPLER THAN turning on a water faucet is the best way to describe how a Turret Tube operates. A twist with the fingers, a squeeze, a twist back again—and it's all over. The user can't help doing it correctly and without lost motion, because an automatic stop makes him stop turning the cap when the holes (in the cap and in the top of the tube) are exactly in line. In closing the tube there is another stop; in either case a half turn is all that is necessary, and in fact all he's allowed to do anyway.

THE LAST INCH of the product is just as good as the first. All along it has been protected because the cap stays right in place all the time. No lost caps, no liners to drop out or to stick to the top of the tube.

THAT EARLY MORNING FOG is a bad time to have to fool around with one of the general run of tube caps. They just will drop to the floor or down the drain. They will get knocked off the shelf and roll away into inconvenient corners, or get mislaid somehow. A very near-sighted man, who naturally has to remove his glasses to shave, has congratulated us on this very point. It's a boon, he says, to the blind and near-blind, and will save him many an extended search. In any event, it's hard for fumbling fingers to match the threads and fit the cap back on the tube again.

Not so with the caps on Anchor Turret Tubes! Here they are permanently attached, securely locked onto the top of the tube by a little projecting shoulder. It's shown in the illustration below, if you are interested in seeing it.

LOOK AGAIN AT ITS LOOKS, observe what a fine finishing touch this uniquely designed cap gives to any tube. It has distinctiveness written all over it. It's a stylish, substantial looking, efficient device—one that is certain to attract attention—and favorable attention, we mean—from consumers wherever they see it.

IT SPEAKS for itself, this new Turret Tube. All you really need to do to be convinced that it would make a big improvement in your packages, as well as in your sales, is to let us send you a few samples. After even a casual examination, and certainly upon using it yourself for a while, you cannot fail to recognize its four main advantages, namely:

1. *The complete protection it gives the product from* the time it leaves your plant until the last of the product is used up.
2. *Its extraordinary convenience for those friends of* yours... the gentle public that buys your product.
3. The elimination of the removable screw cap with all its grief.
4. *The plus value it gives your product, a value you can* exploit and promote... an active force in creating good will... a feature that gives you a decided edge *over competing products.*

CUTAWAY VIEW OF THE TOP OF
TUBE AND CAP CONSTRUCTION

Note in the illustration to the right the generous sized aperture in the cap from which the contents are ejected. This view shows the cap in an open position, lined up with the aperture.

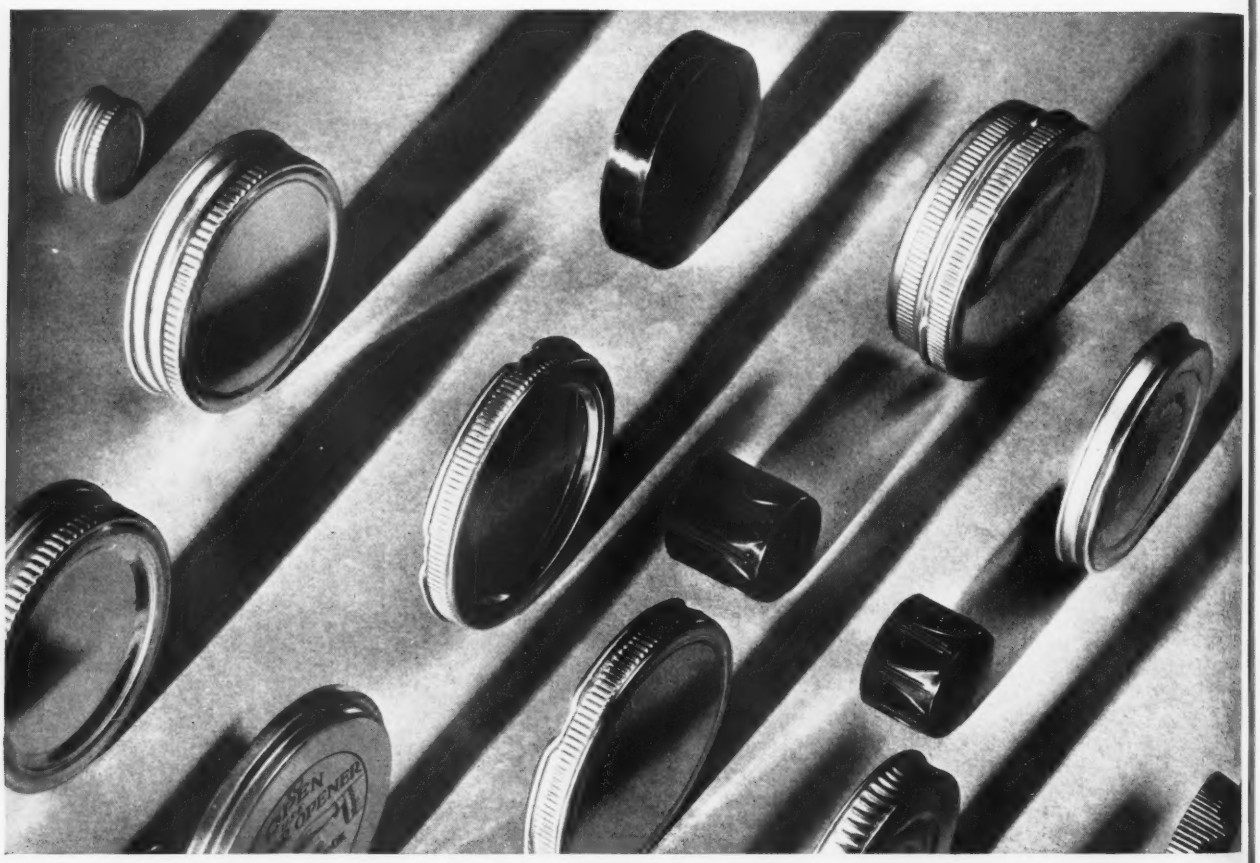
Just below this aperture you can plainly see the projecting shoulder or ledge that bulges outward. This projection extends around the entire circumference of the top of the tube and is formed in it by a separate manufacturing operation after the cap is in place. It securely locks the cap on the tube, yet allows it to rotate freely.

Note also the lug (directly above the arrow) which prevents the turning of the cap beyond a specified point, thus providing the automatic stop that contributes so much to the unusual and welcome convenience of the Anchor Turret Tube.

EACH WITH A JOB TO DO

● If a single one of these different styles of Anchor Closures could be eliminated, it would be foolish not to do so—for much money could be saved. But each of Anchor's nineteen different styles has its own particular job to do, its own special advantages for certain products and under particular conditions.

● This complete line of caps is one of the very definite reasons for doing business with Anchor. The mere fact that all these other types and styles exist gives greater value to the cap selected for your products—because of the assurance it gives of correct design and perfect adaptability to meet *your* conditions.



Anchor Cap and Closure Corporation

22 Queens Street — Long Island City, N. Y.

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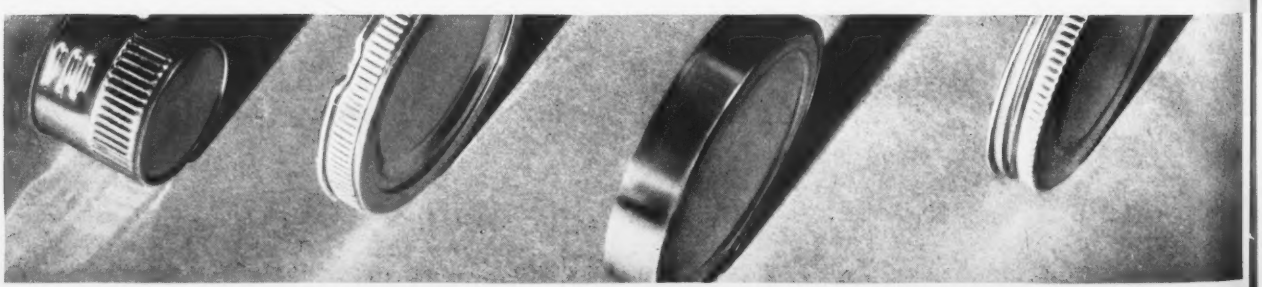


NRA MEMBER U.S. WE DO OUR PART

MAKE YOUR PRODUCT

EASY TO SEE EASIER TO SELL!

THAT'S the secret of successful selling these days. Competition is *keen*. Hundreds of products vie with yours for the customer's attention! Make yours *stand out* from the crowd. Stop the roving eye—and you start the sale.

Color will do it . . . as manufacturers of every line from toothbrushes to kitchen equipment have proved. And Maryland *Blue* Bottles and Jars will give your product a *distinctive* color. Their rich, brilliant blue catches the eyes of your customers and reminds them to buy. Not only makes your bottle or jar easy to identify but suggests the high quality of the product within. Result: your product is seen, recognized and bought more frequently.

Let us send free samples and show you how your product will look dressed up in Maryland *Blue* Bottles. They are made in a wide variety of modern stock shapes and sizes, which are very distinctive when used with appropriate caps and labels.

Maryland *Blue* Bottles are also made in special designs for many famous products. In requesting samples, just tell us the nature of your product and the sizes in which it is packed. Or, better still, send us samples of your present containers.

Maryland Green Tint and Flint Bottles are of the same high quality as Maryland Blue

MARYLAND GLASS CORPORATION

Baltimore, Maryland

New York Representative: 270 BROADWAY, New York City

Pacific Coast Representative: OWENS-ILLINOIS PACIFIC COAST CO., San Francisco, Cal.

Maryland BLUE Bottles

THE MARK
OF QUALITY
WORLDS · LARGEST

Distinctive GOOD TASTE

Modern, simple, profitable—because they're distinctive, because they're in good taste. That's why women prefer cosmetics in these smart HA Opal Glass Jars. They're straight-sided, pure white and round. The closures are rich black—a color combination that makes any label attractive. You can get HA Opal Jars in capacities of one-quarter ounce to sixteen ounces inclusive.

HAZEL-ATLAS GLASS CO.

WHEELING, W. VA.

OPAL WARE · MANUFACTURERS

The New Dispensing Bottle

THE IDEAL, NEW DISPENSING BOTTLE FOR BULK PERFUME

Here is the ideal bottle to be used for dispensing perfumes. The illustration on the left shows our new No. 337 eight ounce bottle.

Beautifully designed, clear, brilliant glass, with graceful floral design cut in the glass, we can offer this number in sizes from one dram to sixteen ounces for sampling, lotions and other toilet preparations.

Also the popular, gem like bottle which gives every effect of cut glass. Furnished with moulded caps or glass stoppers in a variety of designs and effects.

In one dram bottles, perfect for dispensing perfumes.

CARR-LOWREY GLASS CO.

Factory and Main Office: BALTIMORE, MD.

NEW YORK OFFICE: 500 FIFTH AVE., Room 1427
Telephone: CHickering 4-0592

CHICAGO OFFICE: 1502 MERCHANDISE MART
Telephone: WHitehall 4326

Special boxes for your special needs!

DO IT RIGHT WITH

DUREZ

If you are about to package a special product . . . if your present package is losing out . . . if your whole line needs quickening, modernizing, stepping-up—*turn the job over to Durez!*

For scores of manufacturers of everything from pills to powder, Durez has made and is making a wide variety of boxes. Some are square, some are circular, some are oblong. Some have detailed insignia, some fancy designs on the lid, some are plain as a doorknob. But whatever their size, whatever their shape or color, they do the job and do it well! Durez packages are successful packages!

All objects made of Durez are strong, hard, tough. Their rich, lustrous finish adds prestige to whatever the container holds. Light in weight, they save shipping costs. Individual in style, they add distinction. Permanent, they reduce breakage. Colorful, they *hold* the eye!

Every one of these products could be packed in Durez: Body powder, Face powder, Belts, Pens and Pencils, Tablets and Pills, Watches, Jewelry, Typewriting ribbons, Confections.

General Plastics, Inc., does not perform the actual molding operation, but supplies the molding compound to molders with whom you work. But we have had a wealth of experience in the packaging field which is yours to draw on at any time. General Plastics, Inc., 1109 Walck Rd., N. Tonawanda, N. Y. Also New York, Chicago, San Francisco, Los Angeles.

DUREZ

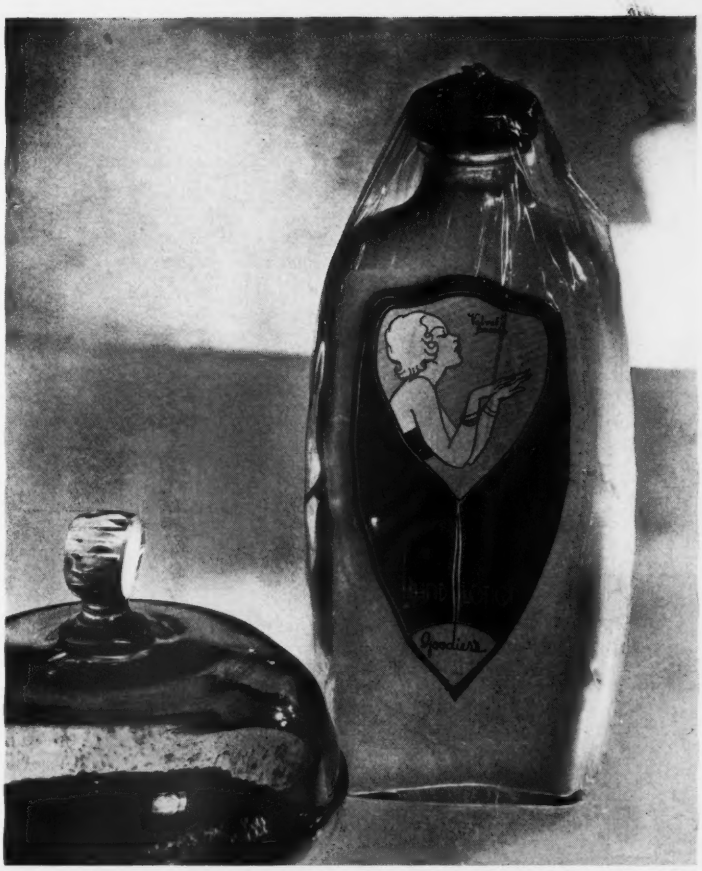
Reg. U. S. Pat. Off.

The Modern Molding Compound

Lady Esther cream is packaged in four sizes of opal jars of special design. The metal caps are matched in color by the simple band label which gives ample opportunity for the attractive design of the jar to be fully appreciated by the observer. (Courtesy, Hazel-Atlas Glass Company).

Dorothy Perkins cosmetic packages were recently redesigned. New packages employ silver and green as their color scheme, giving them a cool, fastidious air of quality. Medium length green molded caps give the bottles a striking appearance. (Courtesy Armstrong Cork & Insulation Co.

Goodier's Hand Lotion, known as "Velvet Smooth" is a late product of Goodier Company. Its attractively shaped bottle, tastefully decorated with a label of interesting shape, and closed with a metal screw cap, is wrapped in transparent cellulose. (Courtesy Hazel-Atlas Glass Company).



The Lady Lillian Manicure Set, recently developed by the Northeastern Laboratories, Inc., is enclosed in a plastic box colored in green and black and matching in color the plastic closures of the bottles. The item has been created as a gift package for the approaching holidays.

Squibb has broken tradition surrounding dozen tins for tablets. Their new Aspirin tin, which is a remarkable innovation, is a slide package, operating with one hand, and exposing one tablet at a time. As one or two tablets are removed, another slides into place.

Following an announcement that the formula of Z. B. T. Baby Talcum has been improved by addition of olive oil, the Crystal Corporation now introduces a newly designed container. The change is entirely one of more attractive decoration, the shape remaining unchanged.

New Beetleware cosmetic jars have been made to meet special standards of service as a result of new developments by the company's laboratories. They are available from stock molds in twelve different colors with molded caps in the same or in a contrasting color.

Carr-Lowrey Glass Company, of Baltimore, is offering another very attractive perfume dispensing bottle shown below. This bottle is very interesting in shape, and gives a sparkling brilliance due to the attractive molding of pressed glass.

Arsen Laboratories have introduced their cold remedies in kit form. The kit is designed for a complete attack upon colds from every angle, containing Nasal Oil, with dropper closure, Arzen Rub, and Cough Drops. (Courtesy of Owens-Illinois Glass Co.)

The Wm. S. Merrell Company announces Merrell's Milk of Magnesia Tablets. The display shown is executed in four colors—dark blue, light gray, red, and white. The tin is in three colors—light gray, red and dark blue, thirty tablets to the tin.

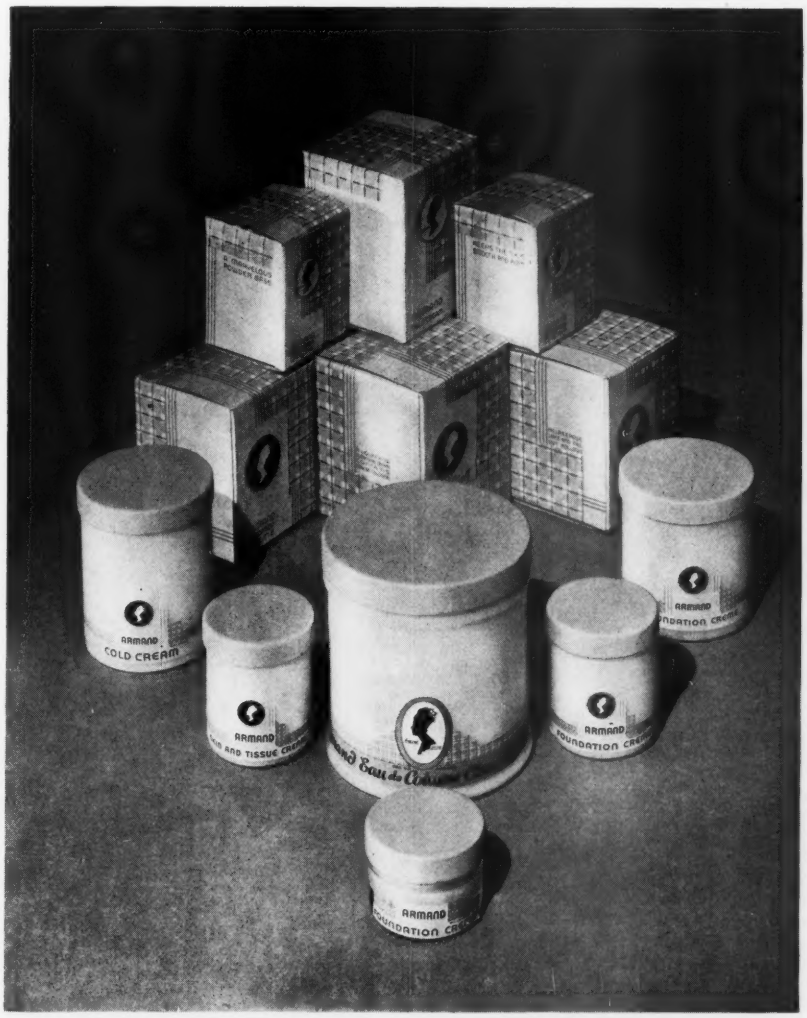
Frederick S. Stearns & Company is offering shaving soap in very modern bowl-shaped plastic containers as shown below at the right. This marks an innovation in shaving soap containers and might well set a new style for the shaving products of the future.

Amur is a new relief for hay fever in snuff form. Features are the wrap-around label with directions on the back, and the double-duty use of a molded cap. The user taps a little of the powder into the cap and then inhales. (Courtesy of General Plastics, Inc.)

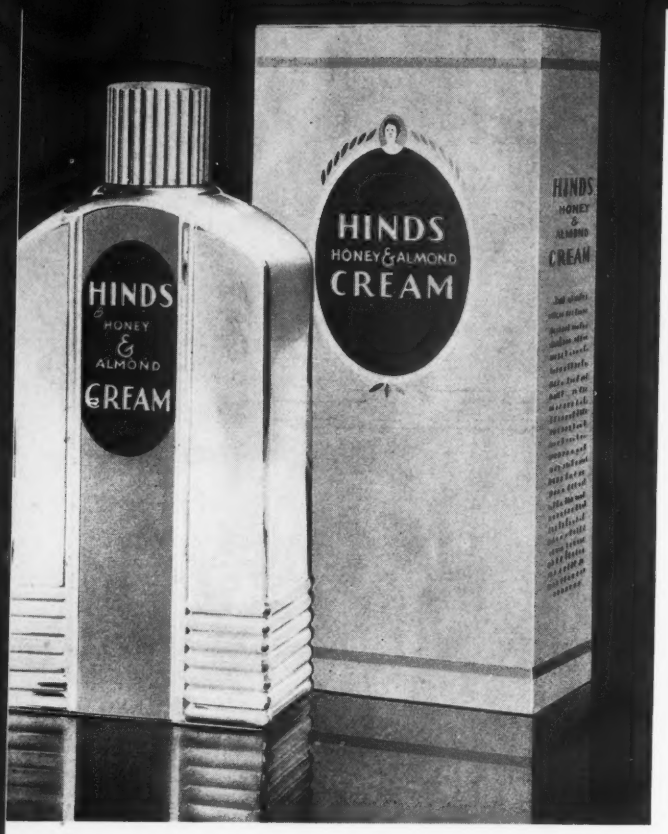
Glazo Company is offering two new manicure kits—one a "Glazo Globe Trotter Set," and the other, shown here, a "Glazo Manicure Purse" containing liquid nail polish, Polish Remover, Cuticle Remover, Nail Tip Whitener, File, Emery Boards, and Orange Stick. The case of this set is of green fabric, lined with moire design material which folds like a toilet kit and snaps shut.

Marie Kay is a new line of cosmetics based upon an unique idea. Proportionate amounts of three basic creams containing all the essential ingredients are mixed according to the needs of each individual skin. The line consists of cleansing, nourishing and protection creams, astringent tonic, powder, rouge, lipstick, mascara, eyebrow pencil, hand cream, and eye shadow. Packages are in cream and black.

Mennen Company is offering its 1933 Gift Box to the drug trade. The new box has an open face, covered with transparent cellulose. Contents, which are priced separately at $1.60, sell in combination for $1.10. Contents are: 53c tube of Mennen Lather Shave (Plain or Menthol-iced) or Mennen Brushless Shave, 39c bottle of Mennen Skin Bracer, 28c can of Mennen Talcum for Men. In addition the box contains four sturdy metal ashtrays.

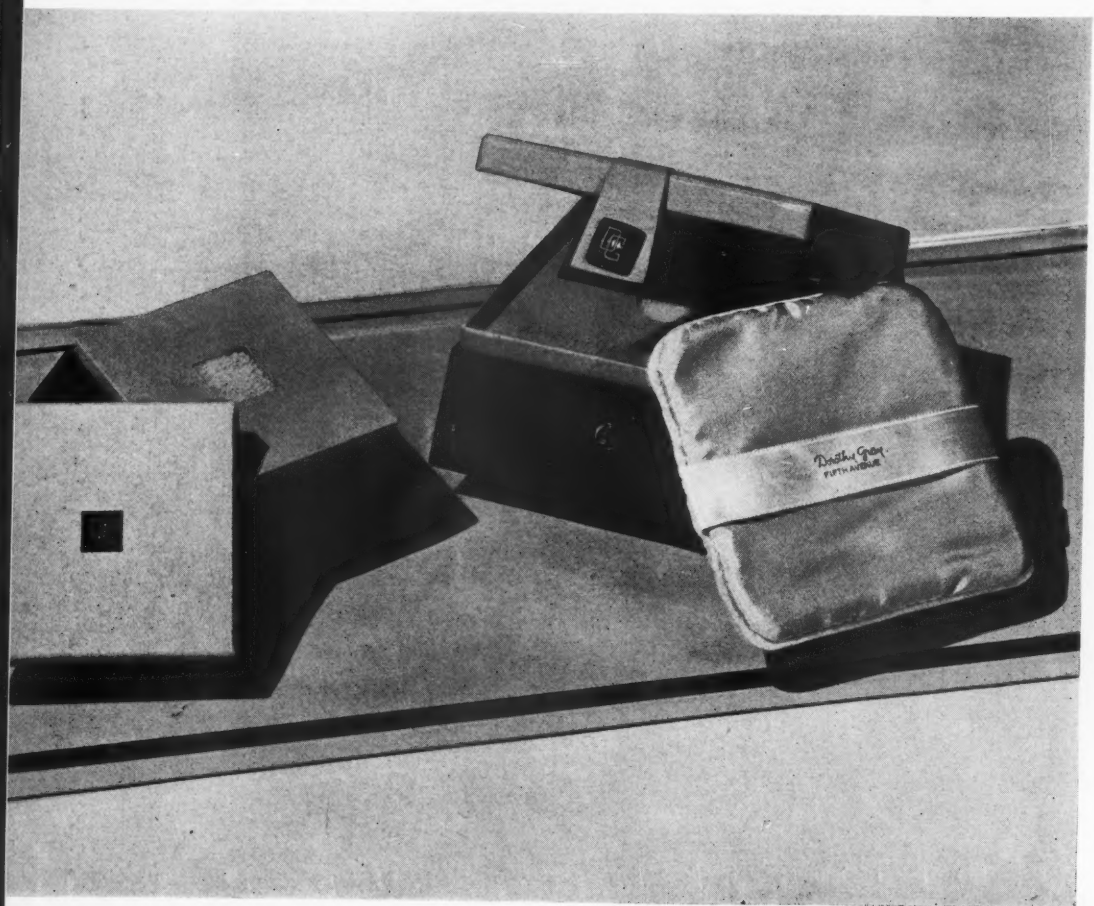


New line of packages now being used by Armand & Company, Inc., is proving very successful in the territory in which it has been introduced. Newly designed jars are closed with double-shell metal caps, and decorated with silhouette labels around the base of the jars. These are enclosed in very attractive folding cartons. While the packages are new, they follow the best Armand tradition, and are easily recognizable. (Photo by Heetfield-Tillou, courtesy of "The Phoenix Flame").



About four years ago the Hinds Honey and Almond Lotion package was changed in four steps over a period of two and one-half years. Now it is more radically changed over night. Today attention is called to the change; then success meant that nobody noticed it. Note that the girl's head is very small on the carton; completely off the bottle.

Dorothy Gray has produced a handsome package for her new face powder consisting of a highly glazed black box with peach decorations and a silk lined puff in the larger box. Powder colors are: Cream, Natural, Rachel, Faun, Aureate, Suntone and Evening.



The Buying Urge
is stimulated perceptibly at the point of sale if the package or container has that "come and take me" appearance, because "buys" are made with the eyes in these days.
Let "Hatch of Lowell" point the way for your product with an original design!
The C. F. HATCH Company
Lowell, Mass.
DU BARRY
COMBINATION
LIQUID NAIL ENAMEL
AND NAIL ENAMEL REMOVER
RICHARD HUDNUT
Introductory Set

CARTONS

. . . but there IS a difference!

. . . a difference in materials
. . . a difference in workmanship
. . . a difference in price

all of which make CROSBY CARTONS ideal packages for introducing your products to the consumer. Cartons by CROSBY encourage initial sales.

CROSBY CARTON COMPANY INC.

743 E. Sixth St. Boston, Mass.

Yardley & Co., Ltd., has completed its fragrance line presented last month with bath salts, dusting and talcum powders and sachet. These items carry out the same design as the others of the group. Dusting powder package is unusual, having an additional flap which separates the puff from the powder.

Marie Earle is offering a smaller size of her Essential Cream which retails for $1.00. Jar is of same design as others of the line. Prices have been reduced on all sizes, the $1.90 size is now priced at $1.75; the $3.50, $3.00; and the $5.75, $5.00.

Mitcham lavender is presented in two new purse sizes—one-half and one ounce packed in flat bottles with red plastic caps covered with clip-on square black plastic tops. The name of the maker, Potter & Moore, is in gold on the top.

Latest additions to Antoine de Paris line are rouge compact in cream enameled case with trade-mark in silver; nail enamels in Pomme Fleur, Corail, Rendre, Sophistiquer Chinois, Noir, and Verdure; Antoine Savon, three black and white cakes to the box, and Antoine toilet tissues.

It is easy to obtain fine molding effects with Resinox

Resinox yields the results skilled molders want . . . clean, uniform moldings that please customers and hold business.

Keep in touch with Resinox developments.

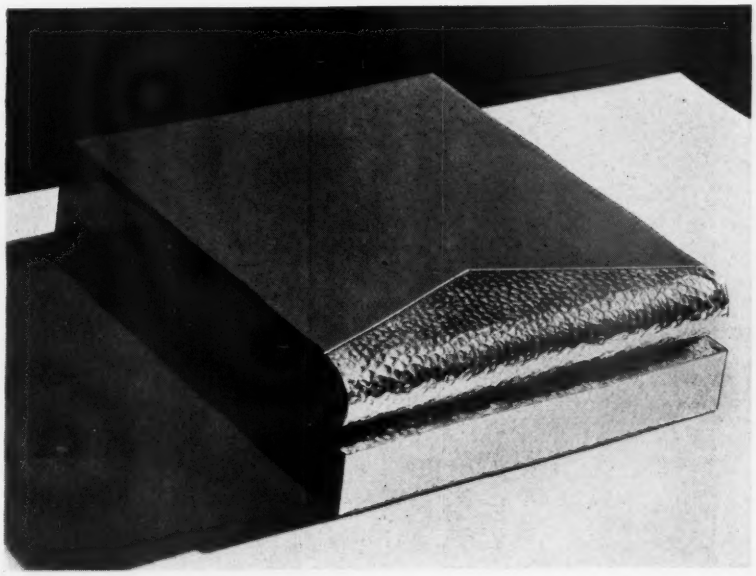
RESINOX

Molding Resins Molding Compounds Laminating Varnishes

RESINOX CORPORATION

Subsidiary of Commercial Solvents Corporation and Corn Products Refining Company

230 Park Avenue, New York City



Wanted . . . an idea!

A new box by Douglas Young, Inc. . . . you know in advance that it is well made, attractive in appearance, practical.

But what is wanted is a new idea,—a sales creating design,—a box which starts your product moving with new snap and speed.

We have several new lines to show manufacturers of cosmetics. One of them may well be the idea you have been looking for! Why not let us show them to you?

Douglas Young, Inc.

FINE PAPER BOX MANUFACTURERS - DISPLAY BOX SPECIALISTS

ONE HUNDRED AND TEN KENYON AVENUE

Pawtucket, R. I.

Harriett Hubbard Ayer's Moth and Freckle Lotion is said to be a mild, safe and effective bleaching preparation, non-drastic in action and non-injurious to the skin fabric, gradually causing freckles, moth patches and brown spots to fade away. It is packaged in the typical Ayer manner.

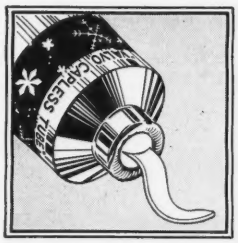
Lockwood Brackett Company, of Boston, have repackaged their line of Laco brand olive oil in newly designed bottles. Four sizes of containers complete the line, all of the same modernistic shape and all closed with metal screw caps. Label designs are in Laco tradition. (Courtesy of Hazel-Atlas Glass Co.)

New handsome and modernistic perfume bottles have been developed by the Owens-Illinois Glass Company as stock items. The bottles are hand blown. Frosted surfaces are skillfully combined with polished glass panels, and similar combination of design is carried into the attractive glass stoppers.

PACK-URGES*

by "Duff" Gordon

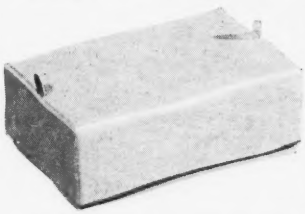
"CAPLESS TUBE" PROVEN SUCCESS AFTER A YEAR'S TRIAL!



Just a little over a year ago Pack-Urges featured a "Capless" tube, suggesting it as the ideal container for tooth pastes, creams, and pastes—by virtue of its eliminating for all time the "lost" tube cap problem—or the costly item of leakage on shipments for foreign climes. Much publicity resulted—and a tooth paste that adopted the new closure reported "success" from the outset.—Now—more than a year later—we have tubes which were filled and numbered for later tests—others in use for twelve months—*and these samples prove beyond question that* the "Capless" tube overcomes many bothersome questions; is economical to manufacture, as it eliminates cap costs; lives up to its guarantee of automatic closure after each time it is used; *and gives manufacturers of tooth paste, shaving* cream or what have you, an additional advertis*able feature for their products. We are predict*ing a continued success for the "Capless" tube *and will send you samples to prove our point.* Write us now for costs and proofs of our state*ments as to its success.*

• • •

MAILERS FOR EVERY PURPOSE



The mailing box *illustrated here is* just one style of *the wide range of* "Gordon" Mailers, suitable for every type of sampling cam*paign . . . Some* are corrugated lined—others have sealed flaps—all are approved by the United States Postal Service . . . *Show us what you want to mail and* we'll build a box around it that will deliver your product in perfect condition . . . Prices are moderate . . . Workmanship unexcelled . . . A call will bring you full particulars.

• • •

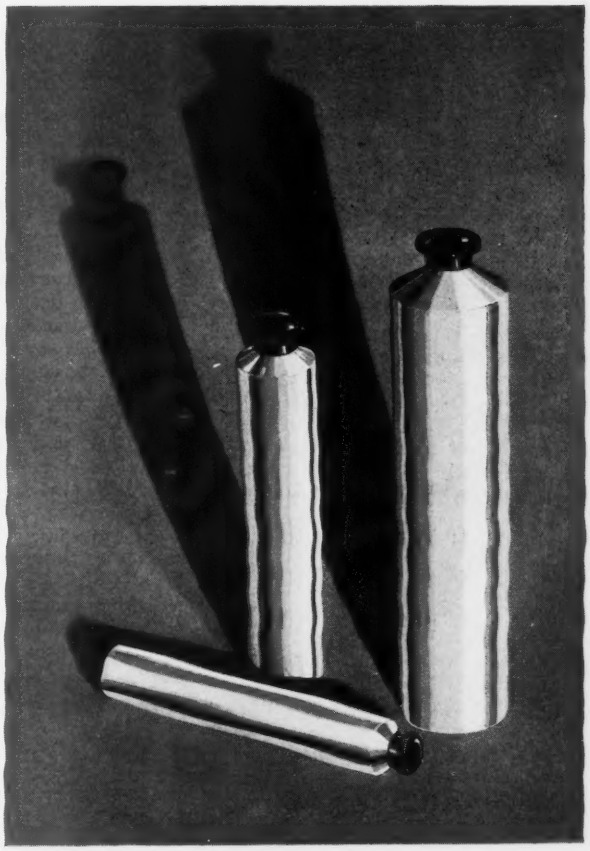
PERFUME AND POWDER BOXES

Every perfumer knows that boxes for Perfumes, *Cosmetics and Toilet Preparations should have* a note of individuality *built into the box.* Style trends and interior decorative preferences are but two of the many phases which we keep in mind when making boxes for the cosmetic *trade . . . The only set-up box included in the* best All American Twelve Packages was handled in detail by us (designed by Mrs. Avery Robinson)—just another example of our ability to interpret your ideas in definite salable boxes. *Call us in on your next box purchase . . .* We'll serve you right—and save you money.

"Pack-Urges" is issued occasionally in the interests of better packages. If you wish to receive it regularly it will be sent free upon request. Address: H. R. M. Gordon —A Complete Packaging Service—341 Madison Ave. (Phone Murray Hill 2-1626) New York.

*Copyright and trade-mark applied for

CHARACTER . . . IN TUBES



WE offer you complete service in the creating and designing of decorated collapsible tubes.

We will also gladly assist you in determining upon the best sizes and styles of tubes for merchandising your product—the most appropriate closure or cap—and any other factors involved in the use of tubes as containers.

NATIONAL COLLAPSIBLE TUBE COMPANY

Providence - - Rhode Island

New York Office—341 Madison Avenue
Telephone MUrray Hill 2-1626

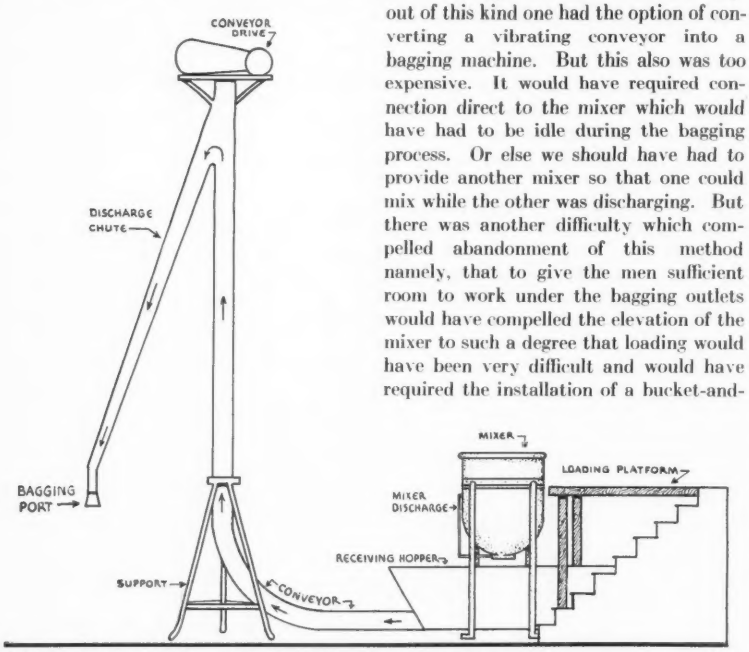
Management Forum

By Francis Chilson
Production Engineer

Material Handling

Some months ago we wrote an account of the Redler type conveyor describing the mass-movement principle upon which it operates and indicating its adaptability for handling an infinite variety of dry materials. Recently we made an installation which is a complete departure from usual applications and proves the versatility of this type of machine. In this case the conveyor was made to serve not only its customary function but it was also made to serve as a bagging machine.

The conveying and the bagging problems in this instance were extremely difficult ones. In the first place the material created an immense amount of noxious dust. It had an abnormally high arching factor so that when it was packed into a hopper, however steep the sides, it would pack with such density that you could poke a two-by-four through the entire charge without dislodging an appreciable quantity. To a certain extent the material is hygroscopic making the weather a factor in its handling. And finally total daily production is insufficient to warrant a large capital outlay for processing and handling equipment. Previously the company had spent considerable money in making an equipment installation which simply failed to function and was thrown out. To begin with them, we had the supreme advantage of being able to profit by the other fellow's mistakes, a careful study of which indicated the things we could *not* do with this material. Other important factors were the lack of head room and the fact that only one floor was available. Had we had an additional floor we might have been able to discharge the mixing equipment through the floor into hoppers fitted with agitators to keep the material aerated so that it would not pack, and from these we might have been able to feed bagging machines. But we didn't have that extra floor and it would not have been economical to get another one because of increased overhead. Besides, most of the worthwhile automatic bagging machines on the market are too expensive for the maximum volume in this case. Nor could we have used a bagging machine on the same floor with the mixing equipment, because most of them are from seven to nine feet high, and since all require a hopper feed, the combined height of bagger and hopper would have made it impossible to load the hopper with any kind of conveyor or even manually in fact. So beggers were out. Next in a layout of this kind one had the option of converting a vibrating conveyor into a bagging machine. But this also was too expensive. It would have required connection direct to the mixer which would have had to be idle during the bagging process. Or else we should have had to provide another mixer so that one could mix while the other was discharging. But there was another difficulty which compelled abandonment of this method namely, that to give the men sufficient room to work under the bagging outlets would have compelled the elevation of the mixer to such a degree that loading would have been very difficult and would have required the installation of a bucket-and-mono-rail system. So then we turned to the Redler as offering the best means of solving our problems. Since the mixer must be kept operating continually in order to turn out the required daily tonnage, we provided a long hopper, open throughout its entire length and connected directly to the conveyor. Then at the discharge end of the conveyor we provided a bagging chute. We elevated the mixer and placed the conveyor-bagging machine under the discharge outlet. Since the Redler is a mass conveyor and cannot carry aerated materials we had to provide a means of exhausting the air quickly. This was done by covering the hopper with unbleached muslin sheeting.

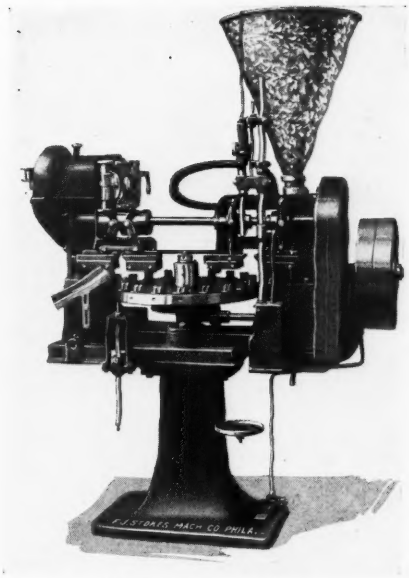


SKETCH OF CONVEYOR-BAGGER

The unit now functions as follows. The raw materials are dumped into the mixer from a platform built behind it. The charge is mixed for a sufficient length of time and is then discharged directly into the hopper of the conveyor. Discharging requires but a minute. The trapped air blows out through the sheeting without allowing any dust into the room. The conveyor is started and the material is bagged off while the second charge is being mixed by the same men who load the mixer. At present the exact weight in each bag must be secured by topping off because of the peculiar nature of the crepe lined bags. But this will be eliminated and the bagging become entirely automatic through the provision of an automatic scale.

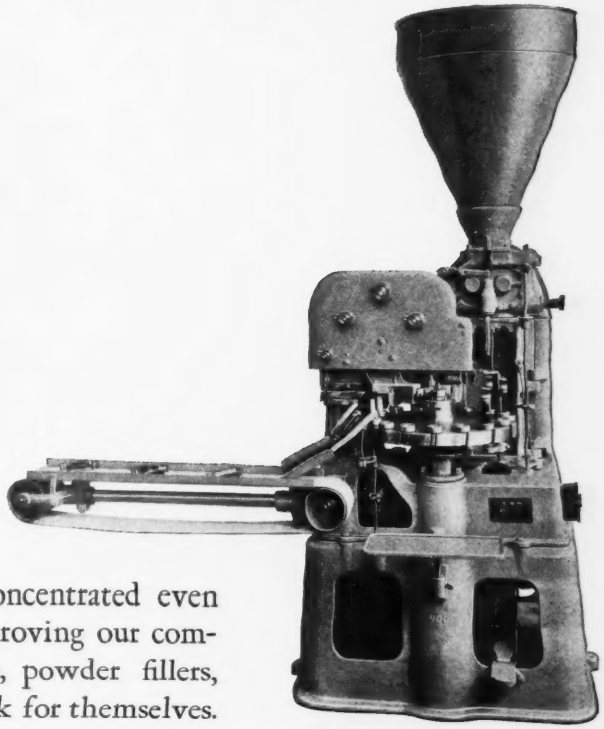
We should not have gone so much into detail describing this application, because it is of immediate interest only to the fine chemical branch of the trade, but for the fact that here is one excellent means of handling other fine materials common to our trade. For instance the grinding of crude drugs, always a dusty and often noxious problem, could be satisfactorily handled in this manner. Supose that your pulverizer was mounted across the receiving bin of the redler. You could discharge directly, releasing the air continuously, and you could convey the ground material directly to the percolators or to storage bins as required. If you are grinding rouge or face powder either by means of a pulverizer or a pebble mill, you could convey the charge directly to the sifters of the filling machines as the case may be. In the case of the pebble mill a grating across the discharge gate would keep the pebbles from dropping into the conveyor. Tablet granulations when handled in large

1923



30 per minute—uses clips
No. 90 Tube Filler, Closer and Clipper

New Machines! New Economies!



1933

50 per minute—uses new "Diamonlock" Clipless Closure
No. 90—D Tube Filler and Closer

During the past few years we have concentrated even more than before on re-designing and improving our complete line—tablet machines, tube fillers, powder fillers, water stills, etc., etc. The illustrations speak for themselves. This is but one example.

Our new catalog describes the latest improved models of all our tube, jar and powder fillers—hand operated to full automatic machines—as well as auxiliary equipment.

Send for this catalog today.

STOKES

Pharmaceutical and Perfumer's Equipment

Tablet Making Machines
Tablet Triturate Molds
Coating and Polishing Pans
Granulating Mixers
Oscillating Granulators
Drying Closets
Drug Mills
Ball and Jar Mills
Sifters and Mixers
Jacketed Kettles
Emulsifiers
Suppository Molds
Lip Stick Molds
Compact Presses
Ointment Mills
Capsule Molds
Capsule Fillers
Powder Fillers
Tube and Jar Fillers
Bottle Washers
Percolators and Extractors
Vacuum Stills
Vacuum Dryers
Vacuum Pumps
Solvent Recovery Apparatus
Water Stills
Conveyors
Special Machinery

Send for Catalog

FJSTOKES MACHINE COMPANY

Pharmaceutical and Perfumer's Equipment Since 1895

5932 TABOR ROAD OLNEY P. O. PHILADELPHIA, PA.

NRA MEMBER U.S. WE DO OUR PART

volume, as for instance in the making of aspirin tablets, could be handled in a similar fashion. And the beauty of this type of installation is that you can discharge into one or any number of supply hoppers so that an entire battery of table presses could be fed from the same source. In regard to cleaning this type of equipment thoroughly we had been highly skeptical. But having played with it we are not afraid of being disputed when we say that with the sole exception of the vibrator there is no other type of conveyor that could be cleaned so easily. Cleaning pads which snap over the links will discharge the conveyor completely and a blower and dust bag will do the rest. We append herewith a crude sketch of the unit and we hope to have a photograph of the installation for you next month. This department will be glad to co-operate with you on projected installations and will make suggestions regarding the handling of your own product. Fire away.

Production Ethics

From time to time we come upon examples of legal dishonesty in connection with the purchase of equipment that burn us up. If it weren't for the libel laws we'd make a black list of firms that make a practice of "stealing" standard equipment. The way the trick is worked is this: the manufacturer needs, let us say, four filling machines, or four cartoners or what have you. But having a smart maintenance engineer, anxious to stick to his job and possessing a rather expensive machine shop, only one is bought, which is then taken apart and used for patterns for the different parts and castings. These are machined and the four machines are then assembled. The maintenance engineer is able to show the big boss a saving of a few dollars in equipment purchases and he is able to look into the glass at a pretty smart fellow. Pretty rotten, what? If such a practice isn't crooked, what can you call it? Another variety of the same type of ethics came to our attention recently. A manufacturer had a special manufacturing problem. He put it up to one of the big equipment houses, which without getting any legal commitment from the manufacturer, worked on the proposition, and after considerable experimentation, solved it. Sketches of the proposed special equipment were submitted together with prices. The "engineer" in this case then took these sketches, made some of the parts and shoped around for the others in local cut-throat machine shops. And the outfit which did the original research and made the sketches was left holding the bag without so much as a"thank-you-mam." How's that for commercial honesty in this day of codes and fair practices? Another outfit, noted for such methods, wrote to a well-known manufacturer and with the utmost audacity asked that he submit *blue prints* of a new machine together with prices. Having been burned once, this equipment maker sat down and quite definitely told them to go to hell. Which was right and proper. We wish that all equipment makers would get together and form a secret black list and refuse to sell such houses. If such firms were unable to buy any equipment the matter would promptly be brought home to the owners who would certainly put an end to it. It seems inconceivable that the presidents of these really reputable concerns know what is going on. We don't decry for an instant the value of a good engineer and a well equipped maintenance shop. Some of the best special equipment we've seen was built by them. But it is one thing to invent and construct a special machine and quite another to steal an existing machine. On the other hand we don't wish to cry in our beer over all the equipment makers. Some are dumb, some are so intent on standardization that they won't make special accessories for a standard machine without robbing you. But for all that their standard equipment is their own and damn the man who steals it from them.

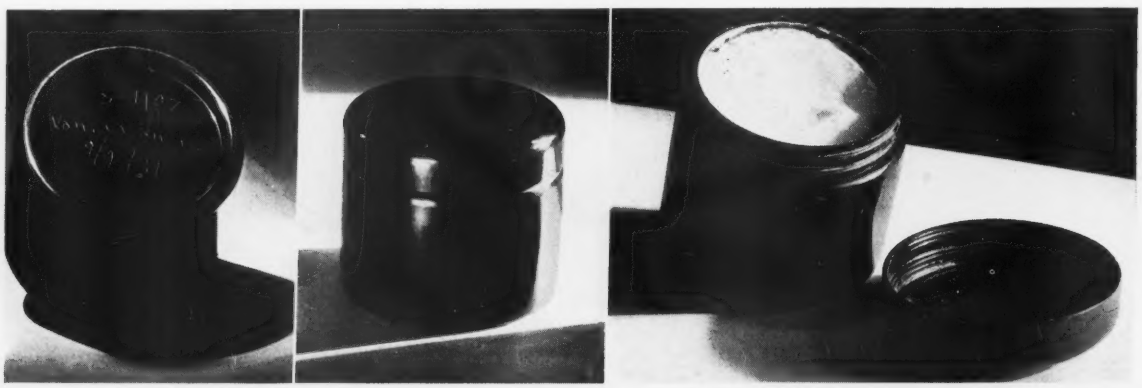
Stokes Catalogue

This department long has wept over the fact that machinery builders simply will not supply catalogues that are either the right size for ready reference and filing or adequately set forth the information that one needs when about to buy a machine. But Stokes new catalogues, of which there are a series, conform very closely to the ideal. On our desk we have one of the series on Tube, Jar Filling and other equipment for cosmetic and pharmaceutical manufacturers. Through the brochure each piece of equipment is clearly illustrated and you are told exactly what the machine is intended for, what products and containers it will fill or process and how. What we like particularly is that you are not given the dope only on the huge automatic machines but you are told all about the small machines used by the small manufacturer for regular production and by the large ones for odd lots and small run items. This we think is a supreme advantage. We know where to buy the big automatic machines—there aren't so terribly many after all—but its the little stuff about which most machinery catalogues are reticent that we don't know where to get.

A Stiff Test

Two years ago a Durez jar containing vanishing cream was set aside for the purpose of determining (1) whether there would be any loss of moisture and (2) whether the cream would have any effect on the plastic container. No liner was put into the jar in order that the sealing efficacy of the container itself might be severely tested. On September 1, 1933 this jar was opened and the cream was said to be in perfect condition without any loss of moisture. There was no rancidity, no odor, no loss of lustre, no cracking away from the sides of the container and not the slightest evidence of discoloration or reaction between cream and container. We think this emphasizes the value of Durez for packaging difficult products.

We made a similar test on closures some years ago, using several types of containers and all the seals we could get hold of. But instead of allowing them to remain on a shelf we put them into an electric oven for six weeks. Then we weighed the containers and found the most astonishing percentage of loss among closures of certain types. This however was merely a closure test and all, of course, were lined with the same material: cork and tin foil. Moral: No matter how you do it always test new materials and new closures.



Conveyors and Packaging Belts

Finishing Belt Conveyor

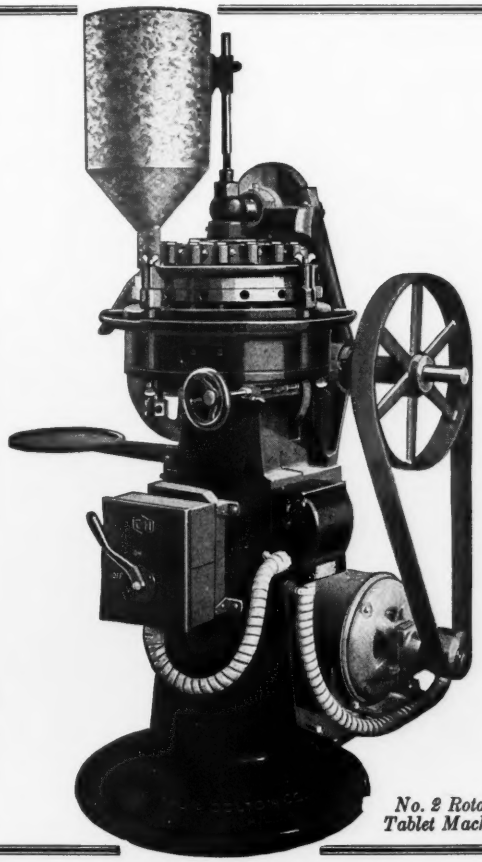
Important equipment at a time like this, are conveyors and packaging belts!—saving labor and time, cutting the corners that often mean the difference between loss and profit on your merchandise.

They enable fewer people to turn out more work. They organize your force into a 100% producing unit. They set the pace that gives you the production you want.

Kiefer Conveyors are made especially for this work. Kiefer engineers can show you how they will save money in your plant.

Our catalog shows all types with full details and interesting plant installations.

The Karl Kiefer Machine Co.
Cincinnati, Ohio



No. 2 Rotary Tablet Machine

New and Improved!

We have no yearly models—but improvements and refinements are being constantly added to Colton machines.

There are over five hundred Colton Rotaries in use.

Superior design, sturdy construction and ease in operation have made this possible.

The No. 2 Rotary Tablet Machine has such desirable features as *positive pressure*, eliminating varying thicknesses of tablets; *hardened steel gear drive*, eliminating frequent replacement of worms used on other makes, and *sliding upper punch holders*, to hold the punches rigidly, enabling the manufacture of special shaped tablets most satisfactorily.

Write for Catalogs.

ARTHUR COLTON COMPANY
2620 East Jefferson Ave.
Detroit, Michigan

Tooth Paste

(*Continued from page 231*)

Flavors: this covers the earthy taste and leaves a pleasant after-sensation.

Lubricant: this makes the paste extrude easily from the tube and also assists in preventing hardening.

Antiseptic, Preservative and Active Agents: these for special purposes. Sometimes more than one function is combined in the same material. The following table will show how the previously mentioned materials function.

Polishing Agents or Bases: precipitated chalk, tricalcium phosphate, calcium phosphate, magnesium oxide, carbonate, phosphate, hydrate, talc, titanium dioxide, soap, fullers earth, bentonite, wilkinite, kaolin, kieselguhr, cuttlefish bone, pulverized orris root, calcium sulphate, calcium phosphate, (because of harsh abrasivesness pumice and cuttlefish bone are seldom used), benzyl alcohol.

Vehicles: glycerine, water, honey, and mixtures of water, syrups and mucilages, ethylene glycol, alcohol.

Binders: starch, glycerite of starch, mucilages of tragacanth, agar, accacia, karaya; pulverized soap.

Sweeteners: sugar, cerelose, honey, saccharine, glucose.

Flavors: peppermint, menthol, wintergreen, anise, eucalyptus, clove, eugenol, cassia.

Lubricants: mineral oil.

Antiseptics: boric acid, benzoic acid, parahydroxy benzoic acid, sodium benzoate, phenol, salol, thymol.

Active Agents: bicarbonate of soda, potassium chlorate, tartaric acid, salt, sodium citrate, magnesium, calcium and sodium peroxides.

With the functions of each material clearly understood, the next step is to evolve formulae with the several functional materials properly balanced. So then we have the following approximate percentages (these represent a general average and each is modified to a certain extent by the properties of the materials used).

Polishing agents	40	to	45	%
Vehicle	40	to	45	"
Binder	4	to	8	"
Sweetener	½	to	4	"
Flavor	½	to	1	"
Antiseptic	1/10	to	2	"
Preservative	1/10	to	½	"
Active agents	1	to	5	"

Of course the nature of the paste will determine how many of the functional groups need be present.

Now we shall develop some formulae for various kinds of paste. We wish to emphasize that all such are experimental formulas to guide research and should be shelf tested before use. After all the only sure way to tell whether a tooth paste will stand up is to age it, a process which can be shortened somewhat with the help of a thermostatically controlled electric oven.

NO. 1. (INEXPENSIVE)

Precipitated chalk	40 lbs.
Colloidal clay	3 lbs.
Tri-calcium phosphate	7 "
Gum tragacanth mucilage (5%)	3 "
Cerelose	4 "
Water	45 "
Flavor	6 ozs.

Procedure: Put the water, cerelose and mucilage into a change can mixer. Sift the dry ingredients and slowly add to the liquids while mixing. Mix until smooth paste is obtained, then run through an ointment mill or over a roller mill.

NO. 2. (HIGH GRADE)

Precipitated chalk	30 lbs.
Tricalcium phosphate	11 "
Powdered gum tragacanth	1 "
Pulverized neutral white soap	6 "
Glycerine	20 "
Water	19 "
Powdered soluble saccharine	2 ozs.
Flavor	1 lb.
Calcium chloride	½ "

Procedure: Mix glycerine and gum. Add the calcium chloride dissolved in the water and allow to mix one-half hour until gum is entirely dissolved. Mix and sieve the dry ingredients and slowly add to the liquid. Mix until smooth white paste is obtained. Mill.

NO. 3. (ACID REACTING TOOTH PASTE)

Titanium oxide	10 lbs.
Kieselguhr finest grade	50 "
Calcium chloride	2 "
Glycerine	40 "
Water	24 "
Tartaric or citric acid solution (10%)	10 "
Pectin from citrus fruits	1 "
Flavor	1 "
Sugar (milk)	5 "
Sodium benzoate	2 ozs.

Procedure: Dissolve the pectin powder in the acid solution. Add the glycerine, water, calcium chloride and sugar. Mix well. Add the preservative. Sift in the dry material, mix thoroughly and mill.

NO. 4. (ALKALINE TOOTH PASTE)

Precipitated chalk	30 lbs.
Magnesium carbonate	15 "
Borax	4 "
Bicarbonate of soda	5 "
Glycerine	20 "
Water	20 "
Powdered neutral white soap	2 "
Saccharine	2 ozs.
Flavor	5 "

Procedure: Similar to No. 1.

NO. 5. (MILK OF MAGNESIA TOOTH PASTE)

Milk of magnesia	30 lbs.
Magnesium carbonate	14 "
Precipitated chalk	25 "
Soap	2 "
Glycerite of starch	15 "
Glycerine	15 "

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Hand Operated and Direct Motor Driven

The No. 8A Rodgers standard filler with direct motor drive, here illustrated, is the most economical power filler on the market. It has a capacity up to 50 per minute. The same machine is available for hand operation. Full details and prices on request.

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Water	25 lbs.
Flavor	8 ozs.
Mineral oil heavy	2 lbs.
Saccharine	2 ozs.

Procedure: To the water add glycerine, saccharine, and milk of magnesia. Mix. Add the glycerite. Mix for half hour and add the dry materials very slowly. Finally add flavors and mineral oil. Mix for another hour and mill.

NO. 6. (SOAP BASE TOOTH PASTE)

Pulverized neutral white soap	22 lbs.
Precipitated chalk	35 "
Colloidal clay	5 "
Saccharine	3 ozs.
Water	10 lbs.
Glycerin	25 "
Alcohol	5 "
Flavor	1 "

Procedure: Make an excipient of the glycerine and water. Slowly stir in the soap. Add the flavors mixed with alcohol. Finally stir in the sifted dry ingredients. Adjust consistency to suit with chalk. Mill.

Because of its detergent action pulverized white soap is useful not only as a binder but also as a base;—one of the largest selling pastes being of this order.

Liniments

(*Continued from page 230*)

Procedure: Dissolve sulphur in ether. Stir into soap liniment. Add glycerin, betanaphthol and alcohol. Filter.

ANALGESIC BALM LINIMENT

Wintergreen oil	60 cc
Menthol	19 grams
Saponin	1 "
Hydrous lanolin	65 "
Water	210 cc
Chloroform	10 "

Procedure: Dissolve the saponin in water. Mix wintergreen and menthol, add chloroform. Bring the two mixtures together and stir in the lanolin.

RHEUMATISM LINIMENT

Menthol	1 pounds
Camphor liniment	6 "
Olive oil	5 "
Methyl salicylate	20 "
Alcohol	4 "

Procedure: Dissolve the menthol in the camphor liniment. Add oil, methyl and alcohol. Filter.

GLYCERIN LINIMENT

Soap liniment	8 pounds
Oil cajaput	1 "
Camphor	1 "
Glycerin	24 "
Rose water	16 "
Alcohol	3 "

Procedure: Dissolve camphor in alcohol add cajaput. Stir in glycerin, rose water and soap liniment.

CROTON OIL

Croton oil	18 ounces
Calamus oil	72 "
Alcohol	70 "

Procedure: Add oils to alcohol and filter.

STIMULATING LINIMENT

Peanut oil	30 ounces
Oleic acid	3 "
Eucalyptus oil	18 "
Turpentine	16 "
Camphor	4 "
Ammonia	40 "

Procedure: Dissolve camphor in turps, add peanut and eucalyptus oils and oleic acid. Then add ammonia and agitate thoroughly.

PAIN KILLER

Capsicum powder	500 ounces
Turpentine (Approximately)	1,650 "
Menthol	80 "
Rape seed oil	240 "
Oil rosemary	40 "
Oil thyme	30 "
Oil lavender	30 "
Oil wintergreen	60 "

Procedure: Percolate the capsicum with the turps so as to obtain about 2,000 ounces of percolate. Add rest of ingredients to this, mix thoroughly and filter.

BELLADONNA LINIMENT

Chloroform	2 pounds
Tinct. belladonna	2 "
Tincture opium	4 "
Tincture aconite	2 "
Soft soap	1 "
Glycerin	2 "
Alcohol	32 "
Ammonia	4 "
Water	1 "
Oil cedar leaf	4 ounces
Oil anise	4 "
Oil sassafras	4 "

Procedure: Mix tinctures with alcohol, add oils and chlorofrom. Mix soft soap and water, stir into above solution. Add ammonia and agitate. Filter.

ANODYNE LINIMENT

Chloral hydrate	2 grams
Thymol	2 "
Chloroform	4 cc
Ether	3 "
Tincture opium	1 "
Soap liniment	120 "
Oil of wintergreen	1 "

Procedure: Dissolve thymol in chloroform and the chloral hydrate in the ether. Mix the two solutions and add to soap liniment. Then add tincture of opium and wintergreen.

ACONITE LINIMENT

Tincture aconite	5 grams
Chloroform	5 "

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Thymol	11	grams
Soap liniment	60	"

Procedure: Dissolve thymol in chloroform, add to soap; mix and add the aconite.

HOUSEHOLD LINIMENT

Tincture capsicum	120	cc
Spirits of camphor	100	"
Ammonia	110	"
Chloroform	85	"
Alcohol	120	"
Oil of cedar leaf	15	"
Oil of hemlock	12	"
Oil of sassafras	15	"
Oil of Rosemary	17	"

Procedure: Mix the ingredients thoroughly and filter.

GENERAL LINIMENT NO. 1

Turpentine	32	ounces
Kerosene	3	"
Oil of Amber	2	"
Oil of origanum	2	"
Oil of cedar	2	"
Oil of wintergreen	3	"

Procedure: Mix in indicated order.

GENERAL LINIMENT NO. 2

Camphor	2	ounces
Myrrh	2	"
Guiacum	1	"
Capsicum	2	"
Oil sassafras	1	"
Oil of wintergreen	1	"
Oil of sandalwood	1	"

Procedure: Macerate ten days and filter.

ATHLETES RUB

Alcohol	100	ounces
Witch hazel	50	"
Methyl salicylate	2	"

Procedure: Mix and filter.

SOAP LINIMENT OFFICIAL

Powd. white soap	60	grams
Camphor	45	"
Oil of rosemary	10	mill.
Alcohol	700	"
Water to make	1,000	"

Procedure: Dissolve camphor and rosemary in alcohol, add the soap and agitate until solution takes place. Age and filter.

In Defense of The Cold Cream

(*Continued from page 227*)

all type—almost any product can be used so long as there is a borax-organic acid emulsifying agent formed in sufficient amount.

Every "different" cream manufacturer feels that to make his new theory sound proper that he must first destroy the cold cream reputation. This he does insidiously by referring to them as the antiquated creams, non-emollient creams, etc. Others more cleverly will stress that their cream is not of such and such variety thus insinuating that to have these properties a cream is of no value.

As an example, one of the latest creams to appear on the market makes use of this latter method to advertise its cream's differences: "Because it is non-alkaline this cream will not dry or dissolve out the natural lubricant of the skin—alkaline creams cause the glands to be overworked because they struggle to neutralize the alkalinity of the cream—etc."

Now the emulsifying agent used in the cold cream type is really a soap formed by the interaction of borax with the free acid of the beeswax. Borax or sodium tetraborate is usually marketed as the decahydrate $Na_2B_4O_7.10H_2O$. Since boric acid is a feeble acid, borax is hydrolyzed by water and the solution has a marked alkaline reaction. It is because of this one fact that many manufacturers felt that their cold cream is an alkaline cream. And if it must be known—they are. Quite a few cold creams on the market today will react pink to phenolphthalein and all of them will react pink if sufficient water is added to cause hydrolysis.

But there is no need for alarm—common reasoning would clearly prove that the above criticisms are unjustified. Chemical facts and experiences are in opposition.

According to the "Dispensatory"—"a borax solution is widely used as a wash for ulcers and abscesses, and especially for inflammatory conditions of the mucous membranes. It is probable that its beneficial action in these conditions is due more to its innocuousness than to its anti-bacterial powers." Certainly this is a powerful authoritative statement as to the non-harmful properties of borax.

Also it must be remembered that the borax content of most cold cream types is quite low—only one-half of one per cent. in the formula cited above. Remember also that the acid number of beeswax is 18 and its percentage composition is 12.5% (in the above formula). There is, therefore, sufficient organic acid in beeswax to react to form a sodium soap with the liberation of free tetraboric acid.

It would appear to be an impossibility to assume that a cream would dissolve out of the skin natural oils and waxes which are of the same type of which the cream is made. Even if there were any free hydroxyl ions it would seem ridiculous to assume that they would wait to saponify the skin oils when they are in direct contact with saponifiable oils and fats of the cream. So it is difficult to see the logic in the statement that the glands of the skin are overworked because they struggle to neutralize the alkalinity of the cream.

There is no need to continue to pick flaws in advertizement statements. Every cosmetic chemist knows that most of them are grossly exaggerated and a few quite untrue. There is an old adage that even today is applicable "the proof of the pudding is in the eating"—It can be changed to "the proof of the cream is the results obtained from its use," and there is plenty of evidence confirming the merits of the cold cream type.

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In concluding it can truthfully be said that many cosmetic manufacturers' reputations have been founded upon the efficacy of an "alkaline" type cream yet they all get panicky the moment a new theory or idea comes forth that criticizes their type of product and emphasizes a different cream and a new theory. If the worried manufacturer would only spend part of his time in retrospection rather than condemning innovations he would realize that one of the most important factors in the growth of the modern commercial cosmetic industry has been the publics appreciation and demand for cold cream. For the good of the industry it would also be wise for all cosmetic manufacturers, even the "different" cream manufacturers, to remember this.

Gums and Resins

(*Continued from page 229*)

gravity 0.988 to 1.007. With age it becomes decidedly acid in reaction. Oil of myrrh contains among other substances, cuminic and cinnamic aldehydes, eugenol, and terpenes such as pinene and limonene[6]. Myrrh, itself, is a pseudo-astringent; it hardens and tones the mucous membranes and is therefore sometimes used in mouth-washes for its effect on the gums. When cold, myrrh is brittle and breaks with an uneven, waxy looking fracture. It imparts a fragrant odor to water, with which it readily yields an emulsion.

Balsams are resins which contain benzoic or cinnamic acids. A number of such materials are known and used in the drug and cosmetic industries. Of these, three will be briefly described here: styrax, balsam peru and balsam tolu. Styrax, also called storax, is obtained from the trunk of the liquid ambers. Levant styrax is collected from Liquid amber orientalis, Miller, whereas American styrax comes from Liquidamber styraciflua, L. One method of obtaining the material is to boil the bark in sea-water. The balsam is then skimmed from the surface of the water. The balsam can be purified by dissolving it in alcohol, filtering the solution and then evaporating the solvent. In this way fragments of bark, woody fibre and other extraneous materials are removed. The Levant product is a thick sticky mass, gray-brown in color, from which a dark layer settles out on standing. The American variety is more nearly solid at ordinary temperatures. It softens and partly liquifies on being heated. Styrax is always heavier than water. It is insoluble in water but dissolves in an equal weight of alcohol. It is also soluble in ether, acetone and carbon disulfide. The composition of this balsam is so variable as to render specifications for it impracticable, if not impossible. Nearly one-half of its mass is water. It contains from 5 to 25% cinnamic acid. Most of the other constituents are derivatives of this acid: ethyl cinnamate, styrene or cinnamene, styracin or styryl cinnamate (cinnamyl cinnamate). The presence of phenyl propyl cinnamate has also been reported.

Balsam Peru is obtained from Toluifera Pereirae, royale. Although the tree is native to Central America, the balsam received its name from the fact that it was at one time shipped to Europe from Peru. This resin is a thick viscid liquid having a dark brown color. It has a vanilla-like odor but it is bitter to the taste. It is not soluble in water and only partly soluble in ether and in petroleum ether. Both alcohol and chloroform dissolve it readily. Its specific gravity is 1.13 to 1.16. Balsam of Peru is often used as a fixative in those cases where the use of other common fixatives is undesirable because of the nature of the materials entering into the perfume composition. It is also used to perfume fats and oils. Peru balsam contains about 50 to 65% benzyl benzoate and small amounts of benzoic and cinnamic esters, among them benzyl cinnamate. It also contains about 5% free cinnamic acid and some vanillin. It is the benzyl benzoate that is supposed to give it its pharmacological properties of acting as a disinfectant and stimulating the function of the mucous membrane. For this reason Balsam of Peru has been employed in cases of chronic bronchitis.

Balsam of Tolu is related to Peru Balsam more closely from a botanical than from a chemical standpoint. Its source is the Toluifera Balsamum, L. This tree is a native of the Magdalena River Valley in Columbia. The balsam is a yellowish brown or grayish brown semi-liquid sticky mass, becoming brittle when cold or when old and dry. It is soluble in alcohol, chloroform and ether but scarcely soluble in water. Qualitatively, its composition is similar to that of Peru Balsam, but it contains only about 7% benzyl benzoate instead of the 50 to 65% of this ester which is present in the other. The amount of free cinnamic acid is higher, about 20%. The chief value of Balsam of Tolu is as a flavoring and perfuming agent.

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New Medicines

(*Continued from page 234*)

matory conditions of internal and external character, whose etiology is to be sought in staphlococci and streptococci infections. Chima S. A. Aktiensgesellschaft, St. Gallen, Switzerland.

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Arteriosal—Dark olive-colored tablets. Contain chlorophyll composition, ground nettle leaves, cocoa and lactose. Used as rejuvenating agent, particularly for hardening of arteries and for counteracting conditions brought about by old gas. Also suggested as prophylactic. Dose:—one tablet 3 times daily before eating, allowed to dissolve in mouth. Apotheker Max Wagners Chemische Fabrik, Leipzig, Germany.

Beridormin—White tablets. Consist of bromodiethylacetyl-carbamide. Used as sedative and soporific. Soporific dose, 1 to 2 tablets before going to bed; as sedative, 0.5 to 1 tablet 3 times daily. In aluminum tubes containing 10 tablets each 0.5 gram. Chemische Fabrik Beringer G.m.b.H., Oranienburg, Germany.

Adrenal Inhalat—Clear liquid for inhalation. Contains suprarenal gland hormone, adrenalin, in combination especially suited for inhalation. Particular advantage of preparation is slight and constant acidity. Preparation is stabilized by special process to pH of 4.0 to 5.0 and contains also an absolutely non-irritating and tasteless preservative of new origin. For bronchial asthma, also bronchitis, grip and grip pneumonia, croupy pneumonia, pulmonary emphysemia, larnygitis, pharnygitis, tracheitis and hay fever. Duration of inhalation 4 minutes and after 15 minutes pause again 4 minutes; as prophylactic 3 times daily 2 to 3 minutes each, particularly before going to bed. Sauerstoff Fabrik Berlin G.b.m.H., Berlin, Germany.

Bononerv Pulver—White powder, completely soluble in water. Contains phenyl dimethylpyrazolone, veramon, "Midolor," citric acid and caffeine. For headaches, toothaches, grip, influenza, monthly menstrual difficulties in women and girls, neuralgia, rheumatism, overindulgence in alcohol and nicotine, mental and physical lassitude. Powder taken dissolved in water, one powder for headaches, etc. and one powder 3 times daily for grip, influenza, rheumatic and nervous pains. Adler Apotheke, Augsburg, Germany.

Brovaloton—Bath preparation containing esters, oil of valerian root in combination with isovalerianic acid, borneol, camphor, pine oil and bromine salts. For neuroses, conditions of abnormal excitement, neurasthenia, nervous insomnia. Novopin Fabrik Pharmacosa G.m.b.H., Berlin-Johannisthal, Germany.

Camphopin—Liquid recommended for rubbing in rheumatic conditions. Contains chloroform, potash soft soap, combined with salicylic acid, mustard oil and oil of rosemary. Novopin Fabrik Pharmacosa G.m.b.H., Berlin-Johannisthal, Germany.

Claudemor Salbe—Also called Claudenocain Haemorrhoidal salve. Dark-brownish salve. Contains claudene, ethyl aminobenzoate (also ethyl aminobenzoate plus aminobenzoyl-diethylaminoethanol), zinc oxide, bismuth subgallate, ammonium sulfoichthyolate, balsam peru and menthol. Used as pain-stilling balsam for all tormenting afflictions in haemorrhoidal troubles, such as pains, itching, bleeding, anal fissures. External haemorrhoides are rubbed with salve. Internal haemorrhoides are treated by introducing small portion of salve into intestines by means of special contrivance inserted into anus. Luitpold Werk, Muenchen, Germany.

Claudemor Suppositories—Each 2.5 gram in weight, gray colored. Composition same as preceding. Same uses. Same maker.

Contralgin—Contains pantocaine in 2% concentration and colorless, odorless and tasteless disinfectant, solbrol. Paste base is non-greasy and easily adsorbed. Possesses power of adhering perfectly to mucous membranes, which results in long-enduring anaesthesia of same. Used for anaesthesizing and disinfecting sound, inflamed and injured parts of mucous membrane; used in treating dental infections, fitting on crowns, extraction of milk teeth, removing tartar, alleviating choking feeling when making impressions of teeth for bridges and like, cutting abscesses as well as treating dolor post extractionem. In 10 gram tubes. Bayer-Meister-Lucius, I. G. Farbenindustrie Aktiengesellschaft, Leverkusen a. Rhein, Germany.

Doba Fichtennadelbad—Brownish-black liquid in metal container. Contains 80 grams of pure pine needle extract and in addition a "lime-salt dissolving" foaming substance, which ensures active penetration of healing terpene into structure of cells of skin. For skin diseases, such as carbuncles, eczemas, after-treatment of lues, etc. Gebrueder Dollfus Chemisch-pharmazeutische Fabrik, Chemnitz, Germany.

Doba Fichtennadel Schwefelbad—Brownish-black liquid in metal containers. Contains 80 grams of pure pine needle extract and colloidal sulfur compounds and a lime-salt dissolving substance. For skin diseases, carbuncles, etc. Same maker.

Doba Kohlensaeure Bad—Package contains two different white powders, packed separately. Acid salt is an acid sulfate and effervescent salt has property of dissolving lime salts which are deposited on skin during evaporation. For difficulties in breathing, disease of heart muscle, difficulties in metabolism, etc. Same maker.

Doba Sauerstoff Bad—Consists of two white powders, packed separately. Contains a perborate and a basic-reacting substance, which serves as a catalyst. The effervescent substance has property of dissolving lime salts deposited on skin. For asthma, difficulties in breathing, poor-blooded conditions, chlorosis, general physical exhaustion, carbuncles, women's troubles, itching skin diseases, weakness of heart muscle, sleeplessness and difficulties in circulation. Same maker.

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SNOWFLAKE CRYSTALS also stands high in the favor of bath crystal manufacturers because of the merchandising and selling qualities it possesses. SNOWFLAKE CRYSTALS is an ideal carrier of perfume and color and is especially appropriate for display in modern containers and transparent packaging material.

Let your business benefit from the sales-making attractiveness of this ideal bath-crystal base. Write today to Dept. B-5 for prices and full information.

SOLVAY SALES CORPORATION

Alkalies and Chemical Products Manufactured by The Solvay Process Company

61 Broadway New York

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SNOWFLAKE CRYSTALS

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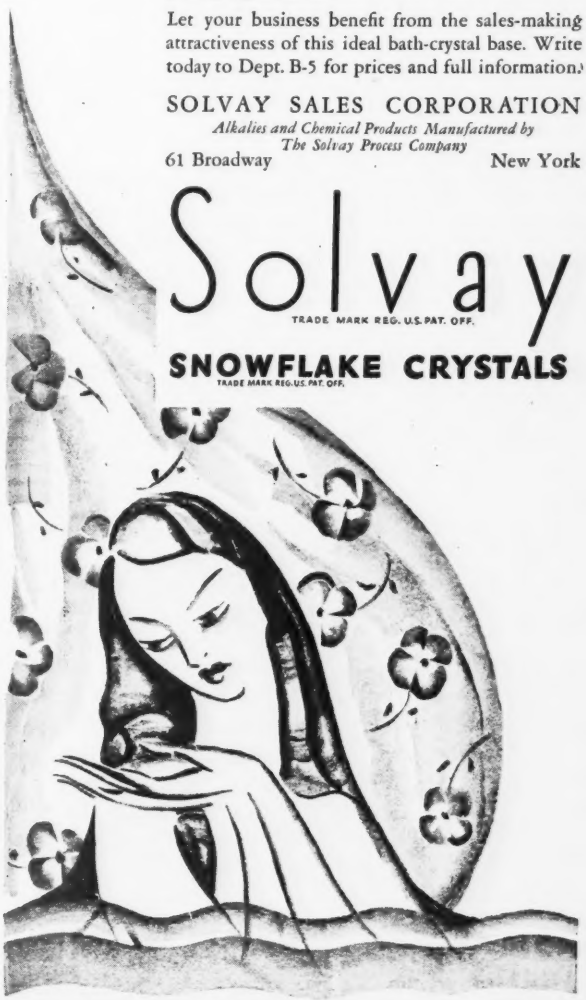

Orofaex—Tablets containing sulfur, iodine in homeopathic dilution, ferments, yeast and phenolphthalein. For carbuncles, ance, pimples, pustiles, impure color. Dose 2 tablets in morning one at noon and 2 at night. Loewen Apotheke, Dresden.

Oropyrin—White tablets in glass tubes. Contain acetylsalicylic acid, aminophenazone and quinine. For grip, neuralgia, rheumatism, sciatica, headaches. Dose 1 to 2 tablets in water or sugared tea 2 to 3 times daily after eating. Loewen Apotheke, Dresden, Germany.

Ozovit—Contains magnesium peroxide. For different kinds of digestive troubles caused by intestinal and stomachic diseases, constipation, fermentation; also for lack of apetite, debility, metabolic diseases, gout, arterio-sclerosis, diabetes and various heart and kidney disorders. Apotheker Friedr. Pascoe, Giessen a.d. Lahn, Germany.

Eldoron Marke "Beaka"—Yellow salve. Contains as active ingredients bismuth salts, zinc oxide, witch hazel extract, anaesthesin and menthol. Used as haemorrhoidal salve for immediate alleviation of pain and itching, for promoting shrivelling of haemorrhoidal nodules and regular activity of intestines. Priv. Berg-Apotheke Fabrik Pharmazeutischer Praeparate, Koeingsberg, Germany.

Enatin—Gelatin capsules filled with clear, colorless liquid. Contains oil of juniper, oil of turpentine, oil of peppermint, sulfur in form of sulfonated oil. For kidney and urether stones, cholelithiasis, cholecystitis, cholangitis. Dose, 3 to 4 times daily before eating. One capsule daily as prophylactic. Chemische Fabrik Helfenberg A.G. normals Eugen Dietrich, Helfenberg bei Dresden, Germany.

Eucalyptus-Menthol-Inhalat "Esseff"—Clear liquid used for inhalation. Consists principally of menthol and eucalyptus oil. For all affections of respiratory passages, such as bronchitis, laryngitis, pharnygitis, rhinitis, tuberculosis; also in more severe disorders, such as larnygeal tuberculosis. Due to its freshening and irritation-reducing action, it is recommended for inhalation after other inhalation preparations. In flasks containing 40 and 250 grams. Saeuerstoff-Fabrik Berlin G.m.b.H., Berlin.

Eukrosan—This is biological hair strengthening lotion. Turbid liquid with light yellow deposit consisting of precipitated sulfur. Consists of bismuth salt, apparently bismuth citrate, mixed with glycerine, a little cholesterin and a little ammonia, in perfumed aqueous solution. A. Wolf, Charlottenburg.

Gastrodenin—Dark, very turbid liquid. A special mixture of decoctions, infusions and extracts of taraxacum officinale, achillea millefolium, salvia officinalis, sanicula curopaea, arnica montana, cardamomum, artemisia absinthium, humulus lupulus, erythraea centaurium. Used particularly in treating ulcus duodeni; also for treating ulcus ventriculi. Dose, 1 teaspoonful 3 times daily before meals. Hch. Reckeweg, Ferford, Germany.

Solvefort—Tablets. Brown colored preparation containing 0.03 gram benzoic acid, 0.005 gram codeine phosphate, 0.002 gram menthol; also licorice and ammonium chlorate. For tracheal and pharyngeal catarrhs, hoarseness, cough, etc. One tablet dissolved in warm water, twice daily. Goda A.G., Bresalu, Germany.

Xenon Radium—Tablets. Each package contains 5 to 10 tubes containing 18 tablets each. Preparation contains effervescent salts and 1.60 x 10.5 mgms. of radium bromide per tablet. For subcutaneous and chronic joint rheumatism, gout and gout diatheses, myalgia and muscular rheumatism, neuralgia and neuritides, sciatica, neuritis, chronic inflammations and suppurations, inflammatory diseases of female sexual organs, skin diseases, such as psoriasis and sclerodermia, myocarditis, cardiac neroses, aterio-sclerosis, etc. Dose, 1 to 2 tablets, dissolved in water, thrice daily.

Alborheumin—Oily solution of methyl salicylate, chloroform and ether. For rheumatism and all sorts of rheumatic pains, lumbago, sciatica, gout, neuralgia, etc. Albert Apotheke R. Junge, Leipzig, Germany.

Azoangen—Reddish-brown tablets. Each tablet weighs 0.6 gram and contains 0.036 gram azohel (reaction product from diaminoazobenzene and aliphatic-oxy acids, such as citric acid). Strong bactericide for colds and infectious diseases, such as catarrhs of upper bronchial passages, grip, angina pectoris, stomatitis. Dose, one tablet dissolved in water and taken in one swallow. Chemische Pharmazeutische Fabrik Dr. Hubold and Bartsch. Gruenherde.

Cejodyl-Terpen—Water-white liquid containing per 100 cc. 0.513 gram beeswax, 1.394 grams iodine, 0.544 gram arsenic and 0.1 gram ozonized terpene. For septic fever, specific for sepsis, diseases of uterus and adnexia, pophoritidis, solperigitidis, pyometria, inflammations of chest, of peritoneum, cardiac weakening, pneumonic tuberculosis, grip, scarlet fever, acute joint rheumatism, cancer cachexia; used in combination with dextrose for undercoating in radiation therapy (before and after irradiation). Dose, 1 to 5 cc. injected intravenously or 0.5 to 1 cc. plus 3 to 5 times volume of sterilized distilled water injected intramuscularly. Atarost G.m.b.H.

Hamapharm.—Soft, white salve, containing pure witch hazel. Used as haemorrhoidal salve, wound salve and healing salve, for sunburn and burns. Albert Apotheke R. Junge, Leipzig, Germany.

Katobesol—Brownish-white tablets. Prepared from embryonic cattle tissue with inorganic catalyst such as cerium salts, which is claimed to increase rate of oxidation while respiration quotient remains unchanged and with far-reaching maintenance of protein metabolism, so that it acts as fat reducer. Body weight is lost even with greater food consumption. Analysis shows 6.8% water, 6.98% ash, 40.80% protein matter, 0.3% fat and 45.12% nitrogen-free extractive substance. Naehrmittelfabrik Muenche G.m.b.H., Berlin-Charlottenburg.

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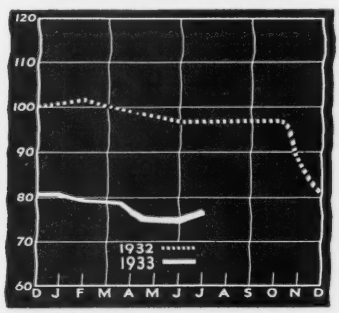
ALCOHOL NEWS

SEPTEMBER ★ A Monthly Series of Technical Articles for Chemists and Executives ★ 1933

ETHYL ALCOHOL PRODUCTION



(Moving 12-month averages, 1931 = 100)

		1933	1932
PRODUCTION			
1000 proof gals.	Jan.-June	52,175	65,382
	June	10,683	10,577
	May	9,149	10,137
SALES			
1000 proof gals.	Jan.-June	47,609	50,787
	June	9,471	9,570
	May	9,044	8,972

INDUSTRIAL ALCOHOL MARKET THE BEST IN THREE YEARS

A considerable volume of business has been booked for the account of the anti-freeze trade during the past month although a somewhat lesser demand was evidenced than in July when a large percentage of the total anti-freeze business was booked. However this decrease was more than offset by an increasing volume of orders from industrial alcohol users to meet their requirements for the balance of the year.

Market conditions are reported to be exceptionally firm and are the best that have been experienced at any time during the past three years.

Price schedules have been well maintained and no changes have been made during the past month. Current quotations at producing points are as follows:

C. D. No. 5

Drums, carlots	34¢ per gal.
Less carlots—1 to 4 drums	42¢ per gal.
5 or more	40¢ per gal.

C. D. No. 10

Prices are 1¢ per gallon higher than C. D. No. 5

S. D. No. 1

Tanks	29.5¢ per gal.
Drums, carlots	33.5¢ per gal.
Less carlots—20 drum lots	35.5¢ per gal.
5–19 drums	39.5¢ per gal.
1–4 drums	41.5¢ per gal.

(Anhydrous grade 5¢ higher)

Ethyl, 190 Proof, tax-paid

Tanks	$2.375 per gal.
Drums, carlots	$2.415 per gal.
Less carlots—20 drum lots	$2.435 per gal.
5–19 drums	$2.515 per gal.
1–4 drums	$2.535 per gal.

Prices on C. D. No. 5 and C. D. No. 10 are for delivery to February 1, 1934, and on S. D. No. 1 and Ethyl, prices are for delivery prior to January 1, 1934.

CHEMICAL EMPLOYMENT UP

The latest records of the Bureau of Labor Statistics show increases for July in both factory employment and pay rolls in the chemical industries. Volume of employment increased 5.5% over the preceding month and was 22% larger than a year ago July.

Pay rolls also showed definite increases over the same periods, and wage increases have been made by several companies. A comparison with index numbers for all manufacturing industries shows that in the chemical industry, both employment and wages continue better than the general average.

U.S.I. CO-OPERATING WITH N.R.A.— FOUR DRUG TRADE CODES FORMED

U. S. Industrial Alcohol Co. and its subsidiary, the U. S. Industrial Chemical Co., Inc., having signed the President's re-employment agreement, are co-operating with other members of the Industrial Alcohol Institute in formulating a code to care for the special problems of the alcohol industry.

At a recent meeting of the Industrial Alcohol Institute, it was decided alcohol manufacturers should sign the code of the Chemical Alliance in lieu of making up a separate individual code at this time. Later a code will be drawn up incorporating features peculiar to the alcohol industry.

Temporary codes have already been approved by the NRA for manufacturers of pharmaceuticals, biologicals and package medicines, setting maximum hours per week and minimum wages for employees. Temporary codes have also been approved for wholesale and retail druggists, designed to meet the special requirements of these trades.

NEW FIXING SOLUTIONS HAVE MANY ADVANTAGES

Several new biological fixing fluids which are said to overcome many of the disadvantages in the older types generally employed have been added to those already recommended. The difficulties in the past have been that the fixing fluids either hardened the tissues too much or interfered with the subsequent staining and serial sectioning. In the new solutions complete penetration is accomplished twice as rapidly and prolonged washing is eliminated.

These new fluids have been developed as the result of intensive research and are more or less free from the above difficulties. Materials fixed in them remain soft and will not harden when placed in a 70 per cent alcohol solution. In addition, all common stains may be used.

Two of the solutions are given as follows:

Cupric-paranitrophenol fixing solution

60 per cent alcohol	100 cc.
Nitric acid, sp. gr. 1.41–1.42	3 cc.
Ether	5 cc.
Cupric nitrate, crystals	2 gms.
Paranitrophenol, crystals	5 gms.

This fluid is perfectly stable and is not limited as to duration of fixation, but has a slow penetration rate.

Cupric-phenol fixing solution

Stock Solution A

Distilled water	100 cc.
Nitric acid, (as above)	12 cc.
Cupric nitrate (as above)	8 gms.

Stock Solution B

80 per cent alcohol	100 cc.
Phenol, crystals	4 gms.
Ether	6 cc.

These solutions are perfectly stable and may be kept in glass stoppered bottles, but the mixture does not keep and for this reason the duration must not exceed forty-eight hours. For use, take: Solution A—one part; Solution B—three parts. In using either fixing solution wash the material in several changes of 70 per cent alcohol.

All brands of U. S. I. pure alcohol are especially recommended for use in fixing solutions and are suitable for all experimental and analytical work where the highest quality material is necessary.

SOLOX—ALL-PURPOSE SOLVENT OF U.S.I. GAINING IN POPULARITY

The proprietary denatured alcohol solvent of the U. S. Industrial Alcohol Co.—Solox—is filling a wide range of commercial needs. Essentially a modified denatured alcohol, formulated to conform to the regulations of the Bureau of Industrial Alcohol and free from the usual permit restrictions of specially denatured alcohol, Solox offers an increasing number of commercial uses. The authorized composition of Solox is:

Specially Denatured Alcohol No. 1	100 parts
Ethyl Acetate	5 parts
Aviation Gasoline	1 part

This formula will immediately indicate the outstanding value of Solox as a solvent. *Specially denatured alcohol No. 1 has long* been employed in many industries and is the most popular and widely used of all industrial alcohols. However, it can only be obtained under the limitations of government permit. Solox is free from such permit restrictions.

Ethyl acetate is a most effective organic solvent and has the unique property of becoming even more active in combination with alcohol. In Solox, therefore, it not only contributes its own solvent power, but actually makes the mixture more efficient than either component used alone.

The aviation gasoline, present in amount of less than 1%, is virtually a negligible factor in the composition, but is of the highest type available and has good odor and quick evaporation characteristics.

Thus, the main features of Solox are an excellent solvent power in all uses where industrial alcohol is ordinarily employed, mild spiritous odor, freedom from permit regulations and, an ever-important consideration—an economical cost.

Uses Practically Unlimited

Solox enjoys a ready demand in the industrial finishes field as a solvent for shellac, gums, and resins, as a constituent of paint and varnish removers and as a solvent for stains and dyes. A component of natural and artificial leather coatings is another important use of this all-purpose solvent. Many chemical specialties, cleaning compounds, insecticides, polishes, cements and the like find Solox a most

(Continued on next page)

The New U. S. Industrial Alcohol Co., five-gallon drum designed to provide a standardized type of container for all products of U. S. I. A. The large trade-mark is lithographed in the company's colors—blue and red. A space is provided on the reverse side for stenciling contents and other specifications.

CARE AND PRESERVATION OF PERFUMES AND COSMETICS

In the manufacture of perfumes and cosmetics proper treatment, storing and handling of the ingredients are as essential as the use of the proper ingredients to insure a finished product that is of a high standard of purity and quality.

It is a prime requisite for a perfume to be crystal clear and preferably no darker than a pale amber color. To insure these features the correct storing of the ingredients and finished articles before they reach the ultimate consumer is important.

Essential oils, entering into perfume manufacture, should not come in contact with air or light more than is necessary. They are commonly shipped in either tin plate or glass containers. Aluminum containers are said to be more satisfactory than tin plate, and amber glass is undoubtedly the best of all. The vessel should be kept tightly sealed—either ground glass stoppers, cork, or wooden stoppers may be used. The container should be kept well filled as some products tend to oxidize readily.

It is often advisable to store essential oils with a certain portion of admixed alcohol. For example, materials like aurantiol, being of a gummy nature, the alcohol acts as a preservative and will prevent polymerization.

In cosmetics, preservation of the ingredients from bacterial decomposition both before and after manufacture is a problem which has only slightly been probed. The addition of a preservative of antiseptic qualities is the present method. The preservative, however, must not change the physical characteristics of the finished product and must also produce lasting effects which will not disappear on evaporation. Addition of small percentages of either the methyl ester or propyl ester of o- or p- hydroxybenzoic acid. These free esters may be added—either dissolved in water—or where the presence of water is undesirable, in 95% alcohol.

In many instances the presence of a dilute solution of alcohol alone is now used.

SOLOX—ALL-PURPOSE SOLVENT—CAN NOW BE SHIPPED IN TANK CARS

(*Continued from preceding page*)

acceptable solvent. In artificial refrigeration Solox is used in the brine circulating system.

Government regulations have been liberalized and it is now possible for solvent buyers to purchase Solox in tank carlots for solvent and manufacturing purposes, but not for resale. A prospective user should simply write the Commissioner of Industrial Alcohol giving the intended employment of Solox, the amount required, and requesting permission to receive the same. Upon receipt of authorization by the Department shipment in tank cars may then be made.

USES OF ALCOHOL IN INDUSTRY—No. 4

ALCOHOL IN FOOD PRODUCTS

Ethyl alcohol enters directly or indirectly into the manufacture and preparation of many food stuffs for human consumption. Gratification of the hunger appetite is not only a necessary but a pleasant indulgence—and alcohol plays its part in making food wholesome and attractive both to the eye and taste.

Vinegar, salt and smoke are three traditional food preservatives. Of these vinegar is a true alcohol product, made by the natural fermentation or "souring" of fruit juices, cider, wine, etc. However, the present-day demand for vinegar is such that it would be almost impossible to supply this need from fruit juices, and every year millions of gallons of alcohol are used to produce vinegar in a special fermentation process. Vinegar so manufactured is pure and wholesome and serves every culinary purpose.

Many of the delightful flavors and odors of food are supplied by essential oils and aromatics dissolved in alcohol. The most common of these is vanilla extract. This is obtained by extracting the ground vanilla bean with pure ethyl alcohol. Chemists also have developed a synthetic vanilla called vanillin. In making vanillin, alcohol is used. Other popular flavoring substances, lemon, raspberry, ginger extracts, etc., as well as the essences of spices, all depend on alcohol for their manufacture.

To please the eye, food colorings are used. Most of these have been derived from, or associated with alcohol somewhere along the line of manufacture. Even the meat-branding inks, which certify to inspection at the packing houses, are dyes dissolved in alcohol with added sugar or glycerine. Certain types of candy are glazed and colored with pure shellac dissolved in alcohol. This glaze makes the candy glossy and attractive and likewise keeps it from sticking and powdering under shipment.

Preservative uses of alcohol in food products are limited to the familiar brandied peaches, pears, etc., where the spirit imparts aroma, taste and preserving action.

A distinctly modern employment of alcohol is in the manufacture of pectin —the "jelling" agent in fruits.

Alcohol is used for the commercial extraction of pectin from ripe fruit and its preparation for the factory and home.

TECHNICAL DEVELOPMENTS

A fountain brush marker on the principle of a fountain pen has been developed for writing or printing on boxes, barrels, fibre cases, etc. The point terminates in a valve head just inside the tip of the marker and this valve releases the flow of ink held in the barrel as the pressure of writing causes it to open slightly. Stencil brushes are made on the same principle.

* * *

A new antiseptic is now being manufactured in this country. Its basic ingredient is free iodine in a solution of glycerine.

* * *

Foaming hair lotions are said to require at least 60–68% of alcohol. In aqueous solutions, it is claimed that lather is produced only in the bottle, by shaking; not on the hair. Many ready-compounded foaming mixtures have a strong alkaline reaction, which makes them unsuitable for hair lotion. Saponin and like substances, however, can be used in lotions of high alcoholic content, because an alkaline reaction is not manifested in an alcohol medium.

* * *

A new acid-proofing material is now furnished in the form of a paste which can be applied to the tops of laboratory desks and tables with a woolen rag. One application gives protection for about 30 days and is said to clean and polish the furniture as well as protect it from acids, alkalies and water.

* * *

Mixtures of ether and chloroform, of different specific gravities, are utilized in the separation of the active constituents of animal glands by fractional sedimentation, under a process recently patented by a German inventor.

* * *

Metal foils of platinum, gold, copper, nickel and aluminum have recently been produced which are of 1 micron thickness (0.00004 inch). This foil has proved valuable for atomic research work.

* * *

A new writing ink, which cannot be chemically eradicated or washed from paper and at the same time is said to be easily washed from hands, rugs, desks or any fabric with ordinary soap and water, has been developed. It is reported to be free-flowing, non-corrosive and has no sediment.

* * *

A new joining material for acid and alkali-proof linings which melts at 600° F. has been placed on the market. It is said to possess high dielectric strength, adhere to all surfaces including metal, porcelain and glass, and is resistant to water, acids, alkalies and oils.

* * *

Surgical scissors with removable blades and hence renewable edges without resharpening are now on the market. Made of stainless steel and finished in various sizes, grinding is eliminated and the shanks are said to far outlast ordinary scissors.

* * *

Iodine-treated bandages and wound-stitching material made of tussah silk have recently been patented. The materials are impregnated with iodine in dilute alcoholic solution of an alkali or alkaline earth metal iodide, drained and air dried.

* * *

An all-metal cap, which is straight sided but made with a knurl, is said to be the first of its kind offering any form of projection to aid in removing the cap from the package. The type shown with the diamond knurl is available in all bottle sizes of the S. T. cap.

U.S. INDUSTRIAL ALCOHOL CO.

WORLD'S LARGEST PRODUCERS OF INDUSTRIAL ALCOHOL

ETHYL ALCOHOL

SPECIALLY DENATURED-*All Formulas* • COMPLETELY DENATURED-*All Formulas* • ANHYDROUS-*Denatured* • ABSOLUTE-*Pure*

SOLOX-*The General Solvent* • PYRO-*The Standard Anti-Freeze*

PURE (190 PROOF) TAX PAID — TAX FREE

U. S. I.—U. S. P.-*Ethyl* • WEBB'S-*Ethyl* • SUNSHINE-*Grain* • GREENDALE-*Grain* • SUNSHINE-*Ethyl*

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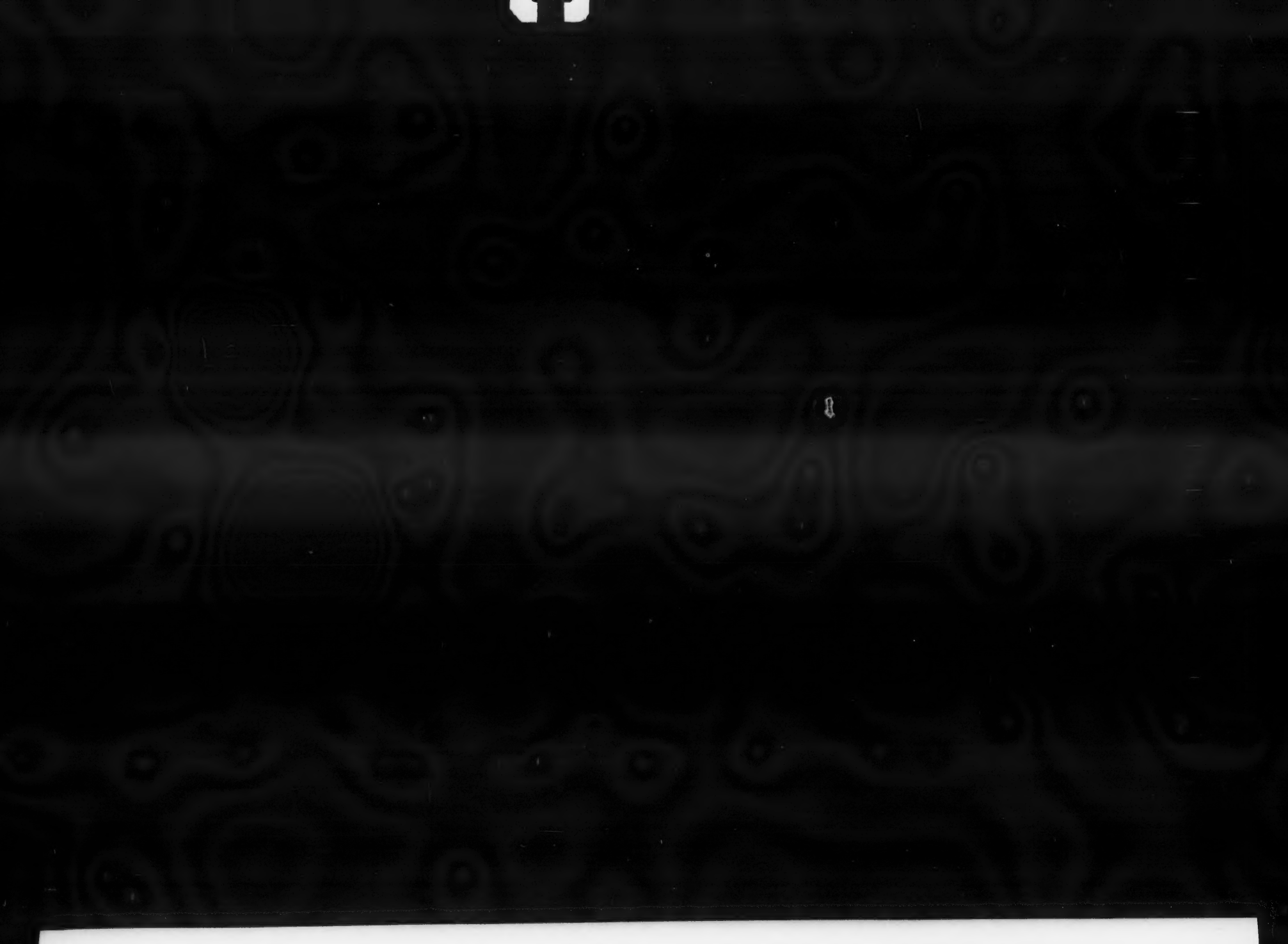


News

Companies

Drug, Inc. Dissolution

The official personnel, capitilization, subsidiaries, etc., of the five new and independent companies which have been set up to bring about the dissolution of Drug, Inc., are as follows:

In its application for a listing on the New York Stock Exchange, Sterling Products stated that it had received a charter from the state of Delaware with which it purposed to replace a charter of the state of West Virginia, where it was originally incorporated in 1927 with an authorized capital of 150,000 shares of no par value and of which 124,240 shares were issued and outstanding on the date of application. The new Delaware corporation has been authorized to issue 1,750,700 shares, par value of $10 each under charter of perpetual existence. The new company was chartered under the laws of Delaware as of April 9, 1932, and has no outstanding obligations in the way of preferred stock or bonds. The new company will acquire all outstanding stock of the old company on a basis stipulated in the agreement for the dissolution of Drug Inc.

Management of the new company will be under the following officers:

Chairman of the board, W. E. Weiss, formerly vice-president and general manager of Drug Inc., Wheeling, W. Va.; president and treasurer, A. H. Diebold, formerly president of Drug Inc.; vice-president, H. J. Behrens, former president of Sterling Products, Inc.; vice-president, E. I. McClintock, secretary of Drug Inc.; vice-president, H. H. Ramsay, former vice-president of Drug Inc.; secretary, Miss S. E. Parks, and comptroller and assistant secretary and assistant treasurer, James Hill, Jr.

Directors of the company include W. E. Weiss, H. F. Behrens and J. Sumner Jones, of Wheeling, W. Va.; A. H. Diebold, Locust Valley, N. Y.; and S. P. Jadwin, George C. Haigh and H. H. Ramsay, of New York.

E. I. McClintock

L. K. Liggett

L. Richardson

H. P. Bristol

Its operating subsidiaries with the state in which they were incorporated are:

The Bayer Co., Inc. (New York); The Bayer Co., Ltd. (Canada); California Fig Syrup Co. (California); The Centaur Co. (New York); The Centaur Co., Ltd. (Canada); Household Products, Inc. (New Jersey); Knowlton Danderine Co. (Illinois); Pepsin Syrup Co. (Illinois); Charles H. Phillips Chemical Co. (Connecticut); Proprietary Agencies, Inc. (Delaware); Proprietary Agencies, Ltd. (England); Proprietary Agencies of Australia, Ltd. (New South Wales); Scott & Turner, Ltd. (Canada); Scott & Turner Limited (England); Sterling Products, Ltd. (Canada); Sterling Remedy Co. (New Jersey); Synthetic Patents Co., Inc. (New York); Three in One Oil Co. (New Jersey); Wells and Richardson Co. Ltd. (Canada); and Wells and Richardson Co., Inc. (Vermont).

All of these companies are 100 per cent. owned by Sterling Products, Inc., and none of them has any funded debt outstanding or authorized. The pro forma consolidated balance sheet of the company as of May 31, 1933, shows total current assets amounting to $27,935,444, including $13,298,507 cash and $8,315,507 marketable securities. Current liabilities were given as aggregating $1,918,914, which would give an indicated net working capital of $26,016,530. Total assets were $41,053,054. For the five months ended May 31, 1933, the company showed a consolidated net income of $3,982,098, which was equal to $2.27 a share on 1,750,700 shares and which was compared with $9,348,314, or $5.33 a share on the same number of shares, for the entire year 1932.

United Drug, Inc., was incorporated in Delaware August 14, 1933, to acquire all of the capital stock of the United Drug Co., a Delaware corporation, consisting of 431,290 shares, par $50 each, issued and outstanding out of a total of 500,000 shares authorized. The new company has an authorized capital stock of 1,400,560 shares, par $5 each.

Its officers are: President, Louis K. Liggett; vice-president, George M. Gales; and secretary and treasurer, J. A. Galvin. The directors of the company include:—

H. H. Ramsay

Charles Francis Adams, Boston; George M. Gales, Locust Valley, N. Y.; George C. Haigh, New York; Louis K. Liggett, Boston; Charles S. Munson, Southport, Conn.; James I. Richards and Frederic E. Snow, Boston; and Eugene W. Stetson, New York.

The New United Drug, Inc., will have as its operating subsidiaries the following concerns:

Absorbent Cotton Co. (Missouri); Hudson Valley Pure Food Co., Inc. (Mass.); Marcus Ward, Inc. (Mass.); National Cigar Stands Co. (Mass.); Seamless Rubber Co., Inc. (Mass.); Seamless Rubber Realty Associates (Mass.); Sherman Envelope Co. (Mass.); United Candy Co.

(Mass.); United Chocolate Refiners Inc. (Mass.); United Cotton Products Co. (Mass.); United Drug Co., Ltd. (Canada); Louis K. Liggett Co., Ltd. (Canada); United Drug Co., Ltd. (Great Britain); and United Drug Building Co. (Mass.).

All of those companies are 100 per cent. owned by United Drug, Inc., and it was stated that by reason of the bankruptcy of the Louis K. Liggett Co., the United Drug Co. as guarantor has been compelled to assume its responsibility under certain leases of the premises where drug stores of the Liggett company were located. United Drug, Inc., it was stated has no funded debt outstanding or authorized but the United Drug Co. of Delaware has outstanding an issue of $40,000,000 principal amount of 25-year 5 per cent. bonds due March 15, 1953.

The pro forma consolidated balance sheet of United Drug, Inc., as of June 30, 1933, showed current assets amounting to $28,394,517, including $11,625,267 cash and $6,119,287 marketable securities. Current liabilities were stated as aggregating $1,656,142, which would indicate a net working capital of $26,738,375. Total assets were $51,210,757.

For the six months ended June 30, the company showed a deficit of $549,775 and for the year 1932 it had a balance to surplus of $223,505, which equalled 15 cents a share on 1,400,560 shares.

Bristol-Myers Co. was incorporated in Delaware, August 11 to acquire all of the capital stock of the Bristol-Myers Co., of New Jersey, consisting of 10,000 shares of no par value, all issued and outstanding. The new corporation has an authorized capital stock of 700,280 shares of $5 par value each. It has no funded debt outstanding or authorized, nor has any of its subsidiaries.

Officers of the company are:—Chairman of the board, William M. Bristol; president, Henry P. Bristol; vice-presidents, Lee H. Bristol, Earl A. Means, and W. L. Bomer; and secretary and treasurer, William M. Bristol, jr. Directors are as follows:—William M. Bristol and Lee H. Bristol, Westfield, N. J.; Russel G. Rogers, West Englewood, N. J.; Henry P. Bristol, Charles J. Nourse, and Russell G. Rankin, New York, and Earl A. Means, Brooklyn, New York.

Its subsidiaries are:—Bristol-Myers Co., Ltd. (New South Wales); Bristol-Myers Co., Ltd. (London); Bristol-Myers Co. of Texas; William Peterman, Inc. (New Jersey); Mum Manufacturing Co. (Delaware). The last named subsidiary has been transferred to Bristol-Myers under the reorganization plan.

The company's pro forma consolidated balance sheet as of May 31, 1933, showed current assets amounting to $4,755,328, including $1,424,700 cash and $1,978,105 in marketable securities. Current liabilities were given as totalling $555,396, indicating a net working capital of $4,199,932. Total assets of the company amounted to $6,393,158.

For the five months ended May 31, the company showed a net income of $1,011, 863, which equalled $1.44 a share on 700, 280 shares. For the year 1932, net income was $2,447,130 or $3.49 a share on the same number of shares.

Succeeding the old Vick Chemical Co. Vick Chemical, Inc., was chartered in Delaware and acquired all of the capital stock of the old corporation consisting of 10,000 shares of no par value. The new company has an authorized capital of 700, 280 shares of $5 par value each, or the same number as the Bristol-Myers Co.

Officers of this company are:—Chairman H. Smith Richardson; president, Lunsford Richardson; vice-president and treasurer, William Y. Preyer; and secretary, James F. Hoge. Directors of the company include:—H. Smith Richardson, Greens Farms, Conn.; Lunsford Richardson, Charles G. Yates, Allan T. Preyer, and Henry B. Yates, Greensboro, N. C.; James F. Hoge and William Y. Preyer, New York; and Hugh D. McKay, Larchmont, N. Y.

The company owns all of the capital stock of the following subsidiaries:—Vick Chemical Co. (North Carolina); Vick Products, Inc. (Delaware); and Morse International (Delaware). The last named is an advertising agency handling the company's advertising in foreign countries as well as in the United States.

In its pro forma consolidated balance sheet as of May 31, 1933, the new company showed current assets totaling $6, 248,441, including $3,488,315 cash and $1,277,734 marketable securities. Current liabilities were given as $370,025, which would indicate a net working capital of $5,878,416. Total assets aggregated $6,750,006.

A consolidated income statement for the five months ended May 31, showed a net income of $792,624, which was equal to $1.13 a share on 700,280 shares. For the year 1932 the net was $2,625,761, or $3.74 a share on the same number of shares. In the five months statement the sum of $500,000 was deducted for advertising and development expense.

Life Savers Corp. was incorporated August 12, 1933, in Delaware to take over the entire capital stock of the old Life Savers, Inc., consisting of 10,000 shares of no par value. The new company has an authorized capital of 350,140 shares of $5 par value each. It has no funded debt outstanding or authorized, nor has any of its subsidiaries.

The management of the company remains in the hands of its former officials and they include:—President, Edward J. Noble; vice-president and secretary, Robert P. Noble; treasurer, Oscar T. Kappes. Directors of the company are as follows:—Edward J. Noble, Robert P. Noble, and Ralph Brush, Greenwich, Conn.; Sidney W. Edlund, Philadelphia; and Oscar T. Kappes, Port Chester, N. Y.

The company has under its management the following wholly owned subsidiaries:—Life Savers Sales, Inc. (Delaware); Life Savers, Inc. (Illinois); Life Savers, Ltd. (Canada); Pine Brothers, Inc. (Pennsylvania); Beech-Nut Company of Canada, Ltd. (Canada); and Life Savers and Beech-Nut Sales Co., Ltd., (Canada).

In a pro forma consolidated balance sheet as of May 31, 1933, the company showed current assets of $2,244,670, including $801,664 in cash and $938,463 in marketable securities. Current liabilities were $220,808 which left an indicated net working capital of $2,023,862. Total assets amounted to $3,081,127.

A consolidated income statement for the five months ended May 31, showed a net income of $328,566, which was equal to 93 cents a share on 350,140 shares. For the calendar year 1932, the net income was $885,257, or $2.52 a share on the same number of shares.

Abbott Appointments

Abbott Laboratories, North Chicago, announces the following reorganization of its Eastern and Central sales districts, effective September 1st, 1933. George Epstein has been appointed manager of the Chicago branch in addition to his former duties as district sales manager of the Chicago Area. F. W. Scheigert, manager Indianapolis branch, takes on additional duties as district sales manager for Indiana and Kentucky. H. P. Dowling, formerly manager Chicago branch, becomes manager of the newly created Philadelphia branch, which will carry in addition to D. R. L. products, a complete stock of Abbott and Swan-Myers pharmaceuticals and specialties. This branch will be located at 1720 Lombard street. D. D. Stiles, formerly professional service representative, has been promoted to district sales manager for the Wisconsin, Minnesota, North and South Dakota and Iowa Area. M. Doblado, formerly Professional service representative, has been promoted to district sales manager for the Pittsburgh-Buffalo-Rochester area. Louis Horrvich, formerly professional service representative, has been promoted to district sales manager for the Philadelphia area. J. C. Wamberg, former Pacific Coast salesman, has been promoted to district sales manager for the New England area.

Crystal Corp. Contract

Crystal Corp., New York, is requiring wholesalers and retailers handling its products to sign a contract which reads in part as follows: "It is understood that the Crystal Corporation will keep me informed as to the specific re-sale prices of its products so that same may be maintained by me in conformity with the appropriate code and I agree to maintain such prices."

POWCO

LABORATORY CONTROLLED BRAND

REG. U.S. PAT. OFF.

Neutral Powdered Soaps

We specialize in the production of Neutral Powdered Soaps primarily for use in dentifrices and toilet preparations.

With the requirements of these types of products in mind Powco Brand Soaps are manufactured from refined edible oils; have no free caustic or free alkali; have a decidedly low moisture content, and are LABORATORY CONTROLLED.

Tested Persian Quince Seed

It is important to know the country of origin of the Quince Seed you buy. Not because this is your primary basis upon which to purchase seed intelligently, for naturally the only thing that counts is the color, quantity and quality of the mucilaginous content. But it helps in determining the true value of the seed, to know its true source of origin.

We have prepared small sample lots of false Persian, Cape, Spanish, Russian and Indian seed. They will provide you with a quick, easy way to accurately identify seed offered you.

Compare these check samples with our TESTED PERSIAN QUINCE SEED. Look for freedom from dirt, mould and insect infestation. Then check,—through the simple but efficient test procedure we offer you—for mucilaginous content, that is, color, quality, quantity and freedom from mould.

You will find POWCO TESTED PERSIAN QUINCE SEED not only the best, but the most economical on this, the true basis of quince seed value.

Concentrated Shaving Cream Base

This product is a creation of our Chief Soap Chemist, and affords a medium for manufacturing a quality finished shaving cream, most expeditiously and most economically.

REMOVES ALL UNCERTAINTY FROM SHAVING CREAM MANUFACTURE

Send for Samples and Compare

JOHN POWELL & CO., Inc.

114 East 32nd Street, New York, N. Y.

Monsanto to Make Alcohol

Plans for the large scale production of ethyl alcohol have been announced by the Monsanto Chemical Co. The plant will be located at the Everett, Mass., works of Monsanto's subsidiary, the Merrimac Chemical Co. Contracts for the first unit to cost $600,000 have been let. Construction will start immediately. The first unit is scheduled to be in operation by the end of the year. It will have an annual capacity of three million gallons, about three per cent. of the total production in this country.

In announcing the addition of alcohol to Monsanto's list of chemicals, Edgar M. Queeny, president, stated: "This latest expansion includes the formation of a new subsidiary, the New England Alcohol Co., in which Monsanto takes a majority stock interest. A minority stock interest has been taken by the Central Aguirre Sugar Co. of Boston. Arrangements have been made with this company to supply molasses, the basic raw material of alcohol from its extensive sugar properties in Porto Rico. Porto Rican molasses enters this country duty free. No new financing is involved."

Cosmetic Houses and NRA

Cosmetic manufacturing houses are active in trying to get the retailers of their goods under the Blue Eagle. A committee working toward this end is composed of Kathleen Mary Quinlan, Clara Ogilvie, Elizabeth Arden, Madame Rubenstein, and three beauty editors of national women's magazines.

A mass meeting was held by the committee on the evening of September 7 in the grand ballroom of the Hotel Pennsylvania, New York. Several stars furnished excellent entertainment for the gathering which was very largely made up of retailers of cosmetics.

The committee tried to get all the retailers present to sign up under the NRA before they left the meeting. The results are said to have been very satisfactory.

M. M. & R. Coffee

Magnus, Mabee & Reynard, Inc., New York, has recently perfected and brought out a soluble dry coffee extract concentrated, which is marketed under their "MOHAWK BRAND." It is said to be a pure coffee product, without grounds, chickory, color or adulterant, manufactured from the finest grade of coffee grown, and concentrated to an instantly soluble powder. It is recommended wherever a genuine, pure Coffee Flavor is needed.

J. & J. Messenger

Johnson & Johnson, New Brunswick, N. J., is now publishing a monthly news sheet, "J. & J. Messenger," which is distributed to wholesale and retail druggists.

Ridgelo—Fast to Light

Lowe Paper Co., Ridgefield, N. J., maker of "Ridgelo" clay coated folding boxboard, has announced that all colors are now fast-to-light. The "Litefast" feature makes many new applications of this board practicable. Clay coating has always meant a smooth, clean surface and fine printing qualities. Now there is the added advantage of shade permanence for containers, cartons or displays.

Clift Drug & Chemical

Clift Drug & Chemical Co., has been organized in Portland, Oregon, to manufacture cosmetics.

A. D. S. Award

American Druggists Syndicate, Long Island City, has instituted a search for the living American pharmacist who has contributed most to the public health of his community. Nominations must be filed by December 1.

Vick Appoints Holder

Vick Chemical Co., Greensboro, N. C., has announced the appointment of Glenn Holder to the advertising department.

Molyneux Appoints

Les Parfums de Molyneux, Inc., New York, has appointed as Sales representative for the Eastern territory, J. J. O'Farrell previously with Northam Warren.

M. M. & R. Enlarges Space

Magnus, Mabee, & Reynard, Inc., New York, has recently enlarged its main offices, located at 32 Cliff st. that city. The additional floor space will be occupied by the company's bookkeeping department, directors' room, technical library, advertising and mailing departments and will also be headquarters for the city salesmen.

Brockway Reorganizes

Brockway Machine Bottle Co. has taken over the assets and liabilities of the Brockway Sales Co., and the name of the combined companies will be the Brockway Glass Co.

Officers of the new firm are: R. L. Warren, president; J. W. Harding, vice president in charge of production; G. A. Mengle, vice president in charge of sales; G. W. Britton, treasurer; F. M. Marshall, secretary and purchasing agent; J. B. Belton, assistant secretary and assistant treasurer.

Pro-Tek Approved

DeVilbliss "Pro-Tek," protective hand cream, has been approved by the Good Housekeeping Institute.

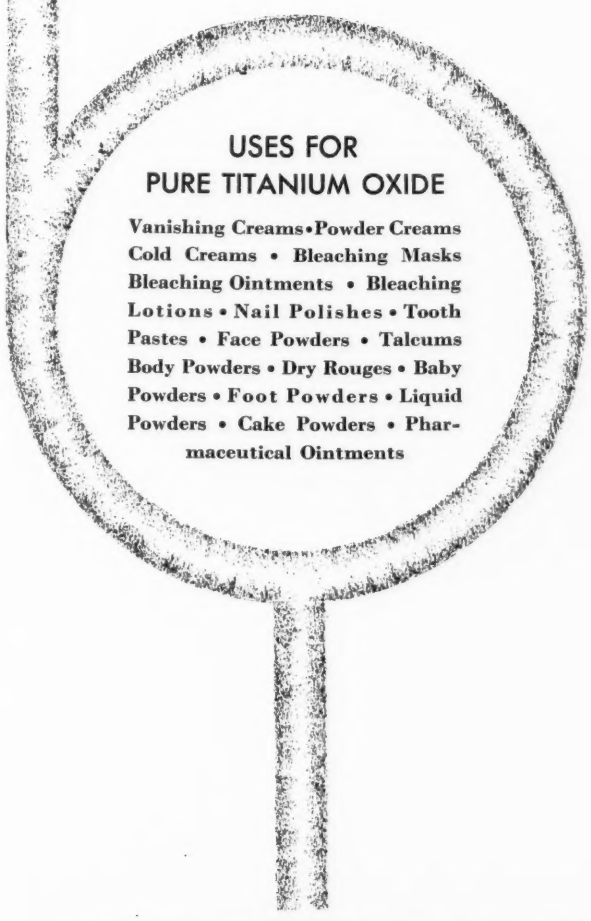
Rossville Changes Name

Rossville Alcohol & Chemical Corp. has changed its name to Rossville Union Distilleries, Inc.

Gutmann Closure

Ferdinand Gutmann & Co., Brooklyn, N. Y. has perfected a unique seal which has met with considerable acceptance by the packaging industry during the past year. It is a combination of the C. T. Screw Cap and Type J—"FILMA-SEAL" (patented 1933) and adaptable for both glass and tin containers. It is a complete guard against counterfeiting. The Film must be torn off and destroyed before the contents of the package can be touched, and the inner seal cannot be replaced. It is the experience of users that "FILMA-SEAL" is the tightest seal of its kind ever developed to prevent leakage and evaporation. The cap or film or both, may be printed with a warning to the purchaser not to accept the package if inner seal is broken or tampered with in any way, thus giving complete protection to both manufacturer and consumer. It is economical in cost and automatic in application.

This modern, whiter pigment replaces harsh irritants


USES FOR
PURE TITANIUM OXIDE
Vanishing Creams • Powder Creams
Cold Creams • Bleaching Masks
Bleaching Ointments • Bleaching
Lotions • Nail Polishes • Tooth
Pastes • Face Powders • Talcums
Body Powders • Dry Rouges • Baby
Powders • Foot Powders • Liquid
Powders • Cake Powders • Phar-
maceutical Ointments

● Chemical inertness and stability combined with unusual particle fineness make Pure Titanium Oxide a valuable pigment in cosmetic manufacture. This pigment never produces irritating alkaline reactions or other undesirable effects in cosmetics or pharmaceuticals ● This pure white opaque pigment is finer in particle size than other commonly used white pigments. It has excellent adhering qualities and remarkable tinting and covering power. When used in vanishing creams, talcum powders, face powders, lotions, tooth pastes and numerous other products, Pure Titanium Oxide improves stability, texture and color ● Every manufacturer of cosmetics and pharmaceuticals should carefully investigate the advantages of Pure Titanium Oxide. Another of our products, Titanox-B (barium base), also has wide application in manufacturing scores of products. All Titanox products are produced under strict laboratory supervision and are widely known for their highly uniform purity ● Get in touch with us now and let us cooperate in adapting Titanox pigments to your formulas. Write today.

TITANIUM PIGMENT COMPANY, INC.

Manufacturers of . . . TITANOX-B (Barium Base)
TITANOX-C (Calcium Base) . PURE TITANIUM OXIDE

111 Broadway, New York, N. Y.; Carondelet Station, St. Louis, Mo.; Pacific Coast Distributor: National Lead *Company of California, 2240 24th Street, San Francisco, Cal.; Canadian Distributor: Wilson, Paterson, Gifford, Ltd., 101 Murray Street, Montreal—132 St.* Helen's Avenue, Toronto, Ont.

TITANOX

Removals

R. F. REVSON CO.

R. F. Revson Co., New York, has announced its removal to larger quarters at 91 Seventh ave., that city. This move was necessitated by the company's rapidly increasing business and by its desire better and more rapidly to serve its clients. The new location provides facilities for carrying

R. F. Revson

stocks for emergency and smaller orders, in addition to warehouse stocks regularly carried by the company.

As part of its expansion program, the company has appointed four local representatives:—Alfred Lippman, jr., New Orleans; L. B. Taylor, jr., Jefferson City, Mo.; L. C. Morris, Atlanta; and J. W. Leser & Co., Los Angeles. The last named company will also carry stocks.

R. L. WATKINS CO.

R. L. Watkins Co., Cleveland, plans to remove its plant and general offices from that city to 338 Elizabeth ave., Newark, N. J. The company will occupy a four-story building there which is now being placed in readiness for operation in October.

TAKAMINE LABORATORIES

Takamine Laboratories has moved its offices and plant from Long Island City to 132 Front st., New York.

LES PARFUMS MOLYNEUX

Les Parfums Molyneux, Inc., New York, has announced that it will move shortly into its new offices in La Maison Francaise, Rockefeller Center, that city.

MERITOL CO.

Meritol Co., drugs and cosmetics, has moved its offices into the plant at Decorah, Ia.

NESTLE LEMUR CO.

Nestle Lemur Co., New York, has moved its offices and plant to 111 Eighth ave., that city.

Vitamin A in Smith Bros.

Smith Brothers Cough Drops plans an advertising campaign featuring the inclusion of "Primary Vitamin A" in the cough drops.

Recamier in Contempt

Recamier Mfg. Co., New York, has been held in contempt of court for violation of the injunction and order of Judge Patterson in the matter of the suit involving use of the name "Harriet Hubbard Ayer" on toilet preparations. It was decreed "that the plaintiff (Recamier Mfg. Co.) has violated said injunction dated May 2, 1932, in that it has represented at least four of its products to be manufactured in accordance with the original formulas used by Harriet Hubbard Ayer in her business in 1886 and 1887, whereas in truth and fact, such products are not manufactured in accordance with such formulas, and the plaintiff (Recamier Mfg. Co.) has further violated said injunction in that it has given undue prominence to the name 'Harriet Hubbard Ayer' in its reference thereto and in that its paraphrase of the permitted legend 'Not Connected With The Business Conducted Since 1907 By Harriet Hubbard Ayer, A New York Corporation' is misleading and not in accordance with the facts;" and further decreed "that the plaintiff (Recamier Mfg. Co.) discontinue forthwith the sale or offering for sale or issuance of packages, labels or statements in any form containing legends and markings objectionable in the respects hereby decreed to be violative of the said injunction."

A judgment was also entered against Recamier Mfg. Co. for $8,936.40 which the Court held to be a fair and reasonable amount of expenses incurred by Harriet Hubbard Ayer, Inc., in the contempt action.

Stoddard Representing Suppliers

Russell Stoddard, formerly of van Ameringen-Haebler, Inc., who has been living in Baltimore for some time past, has made arrangements to represent five prominent raw material houses in that territory. The houses which he will represent are: W. Benkert & Co., Inc., New York; Budd Aromatic Chemical Co., Inc., New York; Harrison Refining Co., New York; National Collapsible Tube Co., Providence, R. I.; S. Schwabacher & Co., Inc., New York.

Smith Appoints Nelson

Smith Chemical & Color Co., New York, has appointed A. E. Nelson to its sales and promotional department.

B. & B. Promotes Strohecker

John R. Strohecker, for many years secretary and manager of Bauer & Black, of New York, the eastern branch of Bauer & Black, Chicago, has been promoted to an important executive position at the home office. He will be succeeded in the Eastern District by A. G. MacPherson, who for the past four years has been manager of the southwestern district for Bauer & Black. Mr. MacPherson's successor in the southwestern district is A. A. Beasley, former assistant district manager. The various changes became effective September 1.

Douglas Young Starts Business

Douglas Young, Inc., has been established in Pawtucket, R. I., as a manufacturer of fine paper boxes and display boxes.

Douglas Young

Douglas Young, president of the company, has acquired a modern plant well equipped for the manufacture of fine set-up boxes for the cosmetic and perfume trade. An up-to-date design department functions under his direction in the creation of new packages.

Sparks from the Flame

Phoenix Metal Cap Co., Inc., Chicago, has published a little booklet entitled, "Sparks from the Flame." It is a reprint of an original article which appeared in the July issue of "The Phoenix Flame," and is an extremely clever dissertation on "the Salesman everybody loves." Every salesman will enjoy reading it and perhaps slipping it to some "favorite" P. A. Copies may be obtained upon request.

Adkins Joins Gillette

Herbert W. Adkins has severed his connections with the Druggists' Supply Corporation to assume the vice-presidency of the Gillette Safety Razor Company. He began his new job on September 1.

Coincident with this change, the Gillette Safety Razor Co. announced a reduction in the price of its blades and the establishment of a new distribution plan of unusual character.

In this plan, Gillette recognizes the service wholesaler as one who "performs the function of maintaining a warehouse and a stock of the manufacturer's merchandise, extending credit to retail dealers, and employs salesmen on the 'hoof,' who call regularly on the retail trade."

Other wholesalers, according to the Gillette definition, are those who perform the function of maintaining a warehouse and a stock of the manufacturer's merchandise, extend credit to retail dealers,

CHARABOT & CO.

Grasse, France

Superfine Essential Oils

HYPERESSENCE OAK MOSS
(Colorless)
For Perfume Extracts

RESINAROME OAK MOSS
For Powders, Talcs and Cosmetics

FLUID RESIN OAK MOSS
For Soap Makers

UNGERER & CO.

ENFLORAL

Vidal-Charvet

Since its introduction, Enfloral has been recognized as the outstanding type of the modern and unusual floral character.

Its predominant natural floral note suggests its use in the desired proportions with practically any odor to impart the floral touch, or used by itself it contributes a really splendid perfume odor.

UNGERER & CO.

13-15 West 20th Street **NEW YORK**

but do not maintain a staff of field salesmen.

Gillette will sell its merchandise to wholesalers in both the foregoing classes at $3.68 per carton, billing the distributors for that amount. The wholesalers in turn are to sell Gillette merchandise to retailers at the same price, $3.68 a carton. In the case of broken carton lots, Gillette has pegged the price at $3.75 a carton.

In return for warehousing and extending credit, which Gillette estimates to average the wholesaler a peak cost of approximately 5 per cent. of net sales, the manufacturer allows wholesalers 10 per cent. to cover all costs and yield a net profit. The service wholesaler is allowed an additional three per cent. for salesmen's commission, provided it can definitely be established that the service wholesaler actually pays the three per cent. to his salesmen. This additional three per cent. is not allowed those who have no salesmen.

As developed by Gillette, the plan requires that wholesalers of both types, service and non-service, be billed by the manufacturer at the amount which the wholesaler charges the retailer. The compensation is turned over to the wholesaler when he settles for his invoice.

Gillette emphasized in its notice to the wholesalers that the 10 per cent. allowance is not a trade discount, but that it is a reimbursement for expenses and a provision for a protected profit.

If any wholesaler does not respect Gillette's marketing policies, the company "may exercise our legal right to cancel the above 10 per cent. reimbursement, and also may exercise our legal right to refuse to sell to such wholesaler distibutors."

New Products

SALLY CLOVER COSMETICS

Clover Farm Stores Corp., Cleveland, a national voluntary group, has introduced a new line of cosmetics and household remedies for sale through member stores. The cosmetics are sold under the name "Sally Clover."

HESS WITCH HAZEL CREAM

Hess Witch Hazel Cream, Chicago, will be marketed about November 1 in a package designed by Harry H. Farrell, that city.

WILDROOTS' ANTISEPTIC

Wildroot Co., Inc., Buffalo, N. Y., has introduced a new mouth wash, "Five Star Antiseptic," in powdered form.

MELODINE ANTISEPTIC

Melodine Products Corp., Los Angeles, is marketing a new antiseptic known as "Melodine," said to be a solution of free iodine in glycerine.

HALEY'S C. T. C.

Haley M-O Co., Geneva, N. Y., is marketing a new effervescent alkalizer known as Haley's C. T. C.

CONSTANCE ALLYN COSMETICS

Constance Allyn is a new line of cosmetics being offered by Robert R. Moyer and Bennet R. Nofziger of Los Angeles.

NEW POND'S PACKAGES

Pond's Extract Co., New York, has announced that its creams will be packaged in new jars to be ready for distribution about October 10. No announcement, however, will be made to the public before December 1, in order to allow retailers to clear their stocks.

PRINCESS LOUISE SHAMPOO

Pharma-Craft Corp., Louisville, Ky., is marketing its new "Princess Louise Shampoo," an alkali-free shampoo packaged in tubes.

NORDEX-NORWICH

Nordex Co., New York, subsidiary of Norwich Pharmacal Co., Norwich, N. Y., is marketing a new "Nordex" sunburn cream.

LA CROSS NAIL POLISH

Schnefel Bros., Inc., Newark, N. J., has brought out a line of "La Gross" nail polish.

PARFUM CHARBERT PRODUCTS

Parfum Charbert has been organized in New York to market "De Toi Je Chant," a new perfume, and the "Drum Stick" lipstick. Herbert H. Harris is president.

HISTEEN TABLETS

Histeen Corp., Chicago, is now offering "Histeen" tablets to relieve hay fever.

MEDISALT DENTIFRICE

Carey Salt Co., Hutchinson, Kan., is marketing a new tooth powder salt known as "Medisalt Dentifrice."

Healy With Hudnut

D. K. Healy has been made advertising director, Hudnut Sales Company, succeeding F. W. Heymeyer.

Buedingen Appoints Moore

Ferdinand Buedingen Co., Inc., Rochester, N. Y., has announced the appointment of E. S. Moore, formerly of Keller-Dorian Paper Co., as New York representative.

Massengill Builds

The S. E. Massengill Co., manufacturing pharmacist, Bristol, Tenn., is erecting a four story brick building containing twenty thousand square feet of floor space as an addition to their present laboratories.

Account Changes

Crooke's Labs. and Dry Milk Co., both of New York, to Murray Breese, that city.

Celery-Vesce Co., Indianapolis, drugs, to Root Agency, Chicago.

McCoy's Labs., New York, cod liver oil concentrate, and Bio Medico, Inc., New York, "Vannay" tablets, to Peck Agency, that city.

Halitosine Co., St. Louis, to Jimm Daughtery, Inc., that city.

Histeen Corp., Chicago, drugs, to Ruthrauff & Ryan, that city.

Parfums Marlaine, New York, and Rose Claire Labs., New York, cosmetics, to Thomas H. Reese & Co., that city.

Thos. Leeming & Co., Inc., New York, to William Esty & Co., that city.

Pinaud, Inc., New York, cosmetics, to Hirshon-Garfield, Inc., that city.

Industries Fatimas of Brazil, manicure products, to N. W. Ayer, Inc., New York.

Raladam Co., Detroit, drugs, to Ruthrauff & Ryan, that city.

Croxon, Inc., New York, depilatory, to Street & Finney, Inc., that city.

Chase Williams Corp., New York, "Melzo," to Frank Presbrey Co., that city.

People

Ken R. Dyke Joins Colgate

Ken R. Dyke has become general advertising manager of the Colgate-Palmolive-Peet Co. He has been in charge of the advertising and promotional activities of Johns-Manville for the last five years. He is chairman of the Copy Testing Committee of the Association of National Advertisers and a member of the Advertising Review Committee formed jointly by the A. N. A. and the American Association of Advertising Agencies.

Schlienger Visits Here

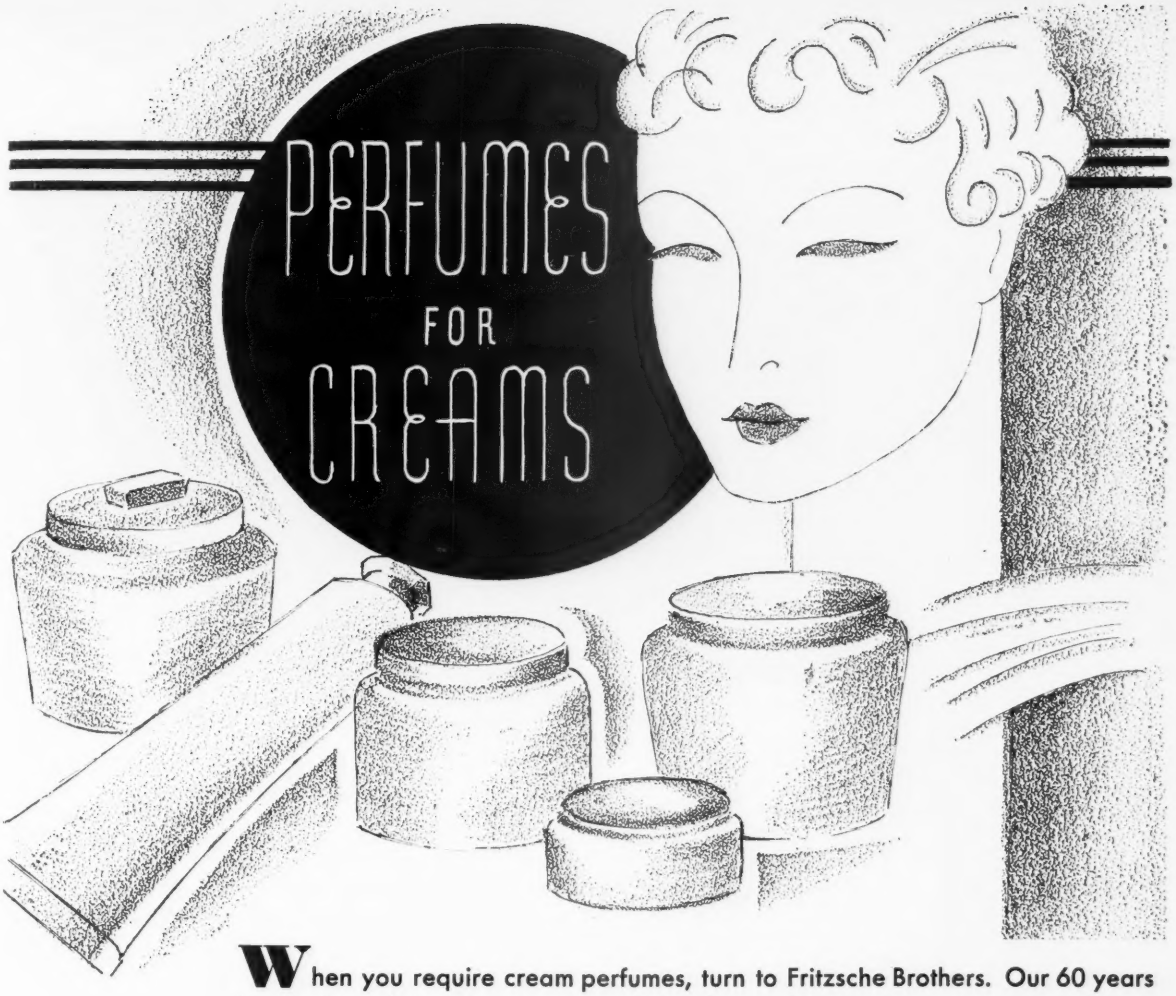
Emil Schlienger, president, Bertrand Freres, Grasse, France, arrived in New York, September 14, aboard the S. S. "Rex." He intends to visit his many friends in this country, making his headquarters while here with P. R. Dreyer, Inc., New York American representative of Bertrand Freres. Mr. Schlienger stated that prices on floral oils will almost certainly be higher due to the fact that growers have neglected their plantations because of the low prices that prevailed during the past few years.

Dr. Searle's Anniversary

Dr. C. Howard Searle, president of G. D. Searle & Co., Chicago, and Mrs. Searle, celebrated their thirty-fifth wedding anniversary August 17. In addition to the good wishes of their many friends, the employees of the company presented them with a very handsome silver gift suitably engraved.

I. V. S. Hillier Joins Ehrmann-Strauss

Isaac V. S. Hillier, who for many years was the head of the old R. Hillier's Son Co., has accepted the management of the wholesale drug and milling departments of the Ehrmann-Strauss Co., Inc., New York. New machinery is being installed and all the milling will be done under his personal supervision.



When you require cream perfumes, turn to Fritzsche Brothers. Our 60 years leadership in laboratory experimentation has enabled us to overcome consistently the difficult manufacturing problems presented by this type of perfume.

The majority of basic materials irritate the skin, and this results in a limited choice to attain the perfume note or factor required for complete satisfaction. Correct solubility presents another problem. And most important, discoloration to the cream under any circumstances on prolonged contact must be prevented.

Fritzsche Brothers perfumes for creams have solved **all** these difficulties and set a new standard in quality. You will find available all the usual floral odors and many new attractive bouquet compositions.

We suggest:

- Orange Blossom
- Gardenia
- Honeysuckle

PRICES AND SAMPLES UPON REQUEST

FRITZSCHE BROTHERS INC.

Proprietors of
PARFUMERIES DE SEILLANS
Seillans, France

118 W. Ohio Street
Chicago

78-84 BEEKMAN ST.,
NEW YORK, N. Y.

Sole Agents in U. S. and Canada for
SCHIMMEL & COMPANY
Miltitz (near Leipzig) Germany

FRITZSCHE BROS. of Canada, Ltd.
77-79 Jarvis Street, Toronto

McPherrin Joins B. & B.

John W. McPherrin, formerly vice-president in charge of sales and advertising for the Chamberlain Medicine Co., Des Moines, has joined the sales executive staff of Bauer & Black, Chicago. For the past several months he has been a member of the staff of the Drug Institute, engaged in organization work. Just prior to this he was a special trade relations representative of J. L. Johnston, president of the Lambert Pharmacal Co., contacting dealers and wholesalers in connection with that company's campaign to combat price-cutting.

Lloyd Bunting Marries

Lloyd Bunting, son of George A. Bunting, president of the Noxzema Chemical Co., Baltimore, and himself an officer in the same corporation, was married September 6 to Miss Dorothy Williams, daughter of Mr. and Mrs. William H. Williams, of Mount Washington, a suburb.

Don B. Clement Joins Coty

Don B. Clement has become supervisor of sales agents on the merchandising staff of Coty, Inc., New York City. He has had over 20 years' experience in the wholesale field in the capacities of salesman, buyer and supervisor, has, during the past four years, been connected with the sundry department of the merchandizing executive office of McKesson & Robbins, Inc., New York City.

Neve Reenters Drug Business

A. J. Neve, merchandise manager of the Owl chain on the Pacific coast for many years; later president of the Sun Drug Co. of this city, which he sold to the L. K. Liggett Co., and more recently president of the Neve chain of 65 drug stores in New York, which were absorbed by the United Cigar-Whelan Drug Store outfit, has reentered the drug store business in Los Angeles.

Evans Stone Joins Agency

Evans E. A. Stone, for ten years director, executive committee member and advertising manager of Stanco, Inc., subsidiary of Standard Oil Company of New Jersey, has joined the staff of Cowan & Dengler, Inc., New York agency.

He was at various times connected with Lambert Pharmacal Co., William Peterman, Inc., and Bristol-Myers Co.

Cole Joins Ogilvie

Ogilvie Sisters, New York, hair, scalp and skin specialists, has appointed Helen J. Cole advertising manager. Miss Cole will be in charge of a national advertising campaign featuring a courtesy hair treatment in department stores and salons.

Kalish With Coty

Joseph Kalish, well known in the drug, cosmetic, and chemical fields as statistician and economist, has become associated with Coty, Inc., New York, as statistician.

Associations

A. P. M. A. Committees

The American Pharmaceutical Manufacturers' Association has announced the following committee appointments for 1933-34. Annual and Semi-Annual Meetings: H. B. Johnson, The Zemmer Co., Chairman; R. R. Patch, The E. L. Patch Co., Vice-Chairman; L. D. Humphrey, G. F. Harvey Co.; Wm. H. Rorer, Wm. H. Rorer, Inc.; F. A. Rostofer, Columbus Pharmacal Co. Attendance Committee: S. B. Penick, Jr., S. B. Penick & Co., Chairman; E. T. Kirkland, Irwin, Neisler & Co., Vice-Chairman; J. L. Dow, P. J. Noyes & Co.; Gilbert Harvey, Harvey, Pittenger Co.; E. H. Thompson, E. H. Shuttleworth Chemical Co. Costs and Cost Finding Methods: Eliot S. Frosst, Charles Frosst & Co., Chairman; Carroll Dunham Smith, Jr., C. D. Smith Pharmacal Co., Vice-Chairman; Wm. Lister, The E. L. Patch Co.; Richard Noonan, Drug Products Co.; E. S. Paisley, National Drug Co.; T. S. Strong, Strong Cobb & Co.; E. W. Weed, G. F. Harvey Company.

Credits and Collections Commiteee: Frank Schopflin, George A. Breon & Co., Chairman; Don C. Westerfield, Westerfield Pharmacal Co., Vice-Chairman; E. P. Crowe, National Drug Co.; E. H. Hessler, G. S. Stoddard & Co.; I. W. Kurtz, The Blue Line Chemical Co.; Henry Osterman, Central Pharmacal Co. Employer-Employee Relations Committee: H. Sheridan Baketel, Reed & Carnrick, Chairman; F. W. Misch, Smith, Dorsey Co., Vice-Chairman; W. W. Davies, Davies, Rose & Co.; L. D. Humphrey, G. F. Harvey Co.; Harry Noonan, Drug Products Co., Inc.; S. B. Penick, Sr., S. B. Penick & Co. Industry and Business Policy Committee: S. DeWitt Clough, Abbott Laboratories, Chairman; C. C. Doll, The Zemmer Co., Vice-Chairman; J. L. Hopkins, J. L. Hopkins Co.; George R. Flint, Flint, Eaton & Co.; Frank A. Mallett, Standard Chemical Co. Industry Code Committee: J. G. Searle, G. D. Searle & Co., Chairman; R. Lincoln McNeil, Robert McNeil; George R. Flint, Flint, Eaton & Co.; J. H. Foy, Maltbie Chemical Co.; C. N. Angst, Pitman-Moore Co.

Laboratory Efficiency Committee: J. B. Frosst, Charles E. Frosst & Co., Chairman; H. C. Rorer, Wm. H. Rorer, Inc, Vice-Chairman; C. M. Bundy, C. M. Bundy Co.; W. A. Crusinberry, Standard Chemical Co.; J. L. Russell, C. E. Jamieson & Co.; P. H. Schmidt, G. D. Searle & Co.; James Patch, The E. L. Patch Co.

Legislative Committee: S. W. Fraser, Burroughs, Wellcome & Co., Chairman; G. S. Logan, Standard Chemical Co., Vice-Chairman; G. W. Case, Sutliff & Case Co.; C. C. Doll, The Zemmer Co.; J. L. Dow, P. J. Noyes Co.; J. H. Foy, Maltbie Chemical Co.; B. B. Grubb, LaFayette Pharmacal Co.; C. E. Jamieson, C. E. Jamieson & Co.; J. D. Keene, First Texas Chemical Manufacturing Co.; I. W. Kurtz, The Blue Line Chemical Co.; F. W. Misch, Smith, Dorsey Co.; Frank Nason, Tailby-Nason Co.; Dr. C. H. Searle, G. D. Searle & Co.; L. C. Urban, Kremers-Urban Co.; W. C. Wendt, Wendt-Bristol Co. Membership Committee: Carroll Dunham Smith, C. D. Smith Pharmacal Co., Chairman; J. G. Van Nortwick, J. L. Hopkins & Co., Vice-Chairman; Eliot Frosst, Charles E. Frosst & Co.; R. Lincoln McNeil, Robert McNeil; Ralph R. Patch, The E. L. Patch Co.; George Ringel, Fritzsche Bros.; Frank Schopflin, George A. Breon & Co.; John G. Searle, G. D. Searle & Co.; I. W. Kurtz, The Blue Line Chemical Co.

Prior Rights Board: R. R. Patch, The E. L. Patch Co., Chairman; H. V. Arny, Columbia College of Pharmacy; H. Sheridan Baketel, Reed & Carnrick; J. H. Beal; Charles Wesley Dunn. Returned Goods Committee: R. R. Patch, The E. L. Patch Co., Chairman; Wm. H. Rorer, Wm. H. Rorer, Inc., Vice-President; Henry Osterman, Central Pharmacal Co.; I. W. Kurtz, The Blue Line Chemical Co.; E. W. Kremers, Kremers-Urban Co. Sales Problems Committee: R. N. Fullerton, Flint, Eaton & Co., Chairman; Frank Nason, Tailby-Nason Co., Vice-Chairman; M. J. Brown, Pitman-Moore Co.; W. J. Burke, Maltbie Chemical Co.; J. C. Fausnaught, Buffington's, Inc.; Geo. A. Colvin, Brunswick Tablet Co.; W. L. Rosenberger, Robert McNeil.

Sales Promotion and Advertising Committee: Lansing Chapman, Medical Economics, Chairman; John Boyer, Calco Chemical Co., Vice-Chairman; R. M. Cain, Abbott Laboratories; F. A. Lawson, The E. L. Patch Co.; C. E. Jamieson, C. E. Jamieson & Co.; F. V. Hawkins, Pitman-Moore Co. Tradename Committee: C. W. Warner, Maltbie Chemical Co., Chairman; H. Sheridan Baketel, Reed & Carnrick; H. B. Johnson, The Zemmer Co.; Harry Noonan, Drug Products. Delegates to National Drug Trade Conference: Harry Noonan, Drug Products Co., Chairman; H. Sheridan Baketel, Reed & Carnick; Carroll Dunham Smith, Sr., C. D. Smith Pharmacal Co.

Executive-Contact Committee: Chas. E. Vanderkleed, Chairman, Robert McNeil; Frank B. Fisk, Vice-Chairman, Pitman-Moore Co.; Jason L. Russell, Secretary, C. E. Jamieson & Co.; Frank R. Eldred, Reed & Carnrick; J. D. Hopkins, The Zemmer Co.; S. B. Penick, Sr., S. B. Penick & Co.; Joseph Rosin, Merck & Co.; J. Allen Tailby, Tailby-Nason Co.

1 pound of PINEALCO yields 20 pints of

TRADE MARK REG. U. S. PAT. OFF.

SYRUP OF WHITE PINE COMPOUND, N. F.

BY A single stroke, you can eliminate all the obstacles that make UNIFORMITY so hard to get into your Syrup of White Pine Compound—USE PINEALCO.

There are from 2 to 10 different grades of each of the botanicals used in the preparation. And two to ten different prices. A uniform product is virtually impossible with the troublesome, expensive old method of producing all the various ingredients.

In PINEALCO (Hopkins) you have a ready-made N. F. Soluble Solid Extract, sure in therapeutic value, uniform every time in color, odor and flavor. The same high quality ingredients are used in making PINEALCO every time.

PINEALCO is so highly concentrated that a single pound will yield 20 pints of Syrup of White Pine Compound, N. F.

Packed in 5, 10, 25 and 50 lb. tins.

Write for our prices and check against your present costs.

TEST SAMPLES and the FAMOUS PINEALCO FORMULA on REQUEST.

MEMBER NRA WE DO OUR PART

J. L. HOPKINS & COMPANY 220 Broadway NEW YORK

SHERKA

CAMPHOR

SYNTHETIC

MADE FROM AMERICAN TURPENTINE

Menthol Crystals SYNTHETIC

Thymol, U. S. P. PRIME WHITE CRYSTALS

Terpin Hydrate, C. P.

Urea CHEMICALLY PURE • TECHNICALLY PURE

Urethane, U. S. P.

NRA MEMBER WE DO OUR PART

PRODUCTS OF SCHERING-KAHLBAUM, A. G., BERLIN

SHERKA CHEMICAL CO. INC.

75 WEST STREET • NEW YORK

TELEPHONE • BOWLING GREEN 9-7482

U. M. M. A. Meeting

United Medicine Manufacturers' of America held its twelfth annual convention at the Sherman Hotel, Chicago, September 11, 12 and 13.

Speakers on the first day included J. O. Clarke, of the United States Food and Drug Department, on the proposed Food & Drugs Act; Wheeler Sammons, of the Drug Insitute; F. L. Roberts, of the Department of Commerce, who will talk on the NRA; James L. Donnelly, of the Illinois Manufacturers' Association; Dr. G. L. Secord, of Chicago Retail Druggists' Association; and John A. Goode, of the National Association of Retail Druggists.

The second day there will be an address by Clinton Robb, U.M.M.A. Counsel. Open discussion will follow. The Food and Drugs bill will also be discussed.

The presiding officers will be: J. M. Ewing, president; I. R. Blackburn, W. W. Burgess, J. B. Van Dyke, vice-presidents; William Holloway, treasurer; Helen Williams, secretary.

Pharmacy Week

Ninth Annual Pharmacy Week will occur during the week of October 9-14. Manufacturers are being asked to cooperate in their radio programs and other advertising by Anton Hogstad, Jr., chairman of the National Pharmacy Week Executive Committee.

American Beeswax Association

American Beeswax Bleachers & Refiners' Association has elected the following officers: president, R. J. Mayer, Theodore Leonhard Wax Co.; vice-president, Howard C. Will, Will & Baumer Candle Co.; secretary and treasurer, Jesse F. Bromund, E. A. Bromund Co.

The companies represented are: E. A. Bromund Co., Harrison Refining Co., Koster Keunen, Theodor Leonhard Wax Co., Mack Miller Candle Co., Muench Kreutzer Candle Co., Smith & Nichols, Inc., Strahl & Pitsch, Webster Wax & Oil Co., Will & Baumer Candle Co.

Package Machinery Institute

The Packaging Machinery Manufacturers' Institute, Inc. was organized at a meeting of the industry in Buffalo on Monday, August 21, at which about 75 per cent. of the industry was represented. A code of fair competition was also prepared and approved unanimously and the institute was authorized to present the code to the National Recovery Administration. The committee which will present the code to the NRA is as follows: Chairman, H. H. Leonard, vice-president and general manager, Consolidated Packaging Machinery Corp.; Col. F. K. Knowlton, president, M. D. Knowlton Co.; Roger L. Putnam, president, Package Machinery Co.

The officers and directors elected by the Institute are as follows: president H. H. Leonard; vice-presidents, Roger L. Putnam, H. K. Becker, vice-president and general manager, Peters Machinery Co.; R. T. Bacjer, president, McDonald Engineering Corp.; Charles L. Barr, sales manager, F. B. Redington Co.; G. Prescott Fuller, wire stitching division, Dexter Folder Co.; A. G. Hatch, general manager, M. D. Knowlton Co.; C. E. Schaeffer, asst. sales manager, Stokes & Smith Co. W. J. Donald of 52 Wall Street, New York, was elected executive vice-president and treasurer.

Chemical Exposition

The Fourteenth Exposition of Chemical Industries will be held at the Grand Central Palace, New York, during the first week, in December.

Advertising Code

The proposed code submitted by the American Association of Advertising Agencies, particularly that section dealing with copy, has been the subject of considerable comment in this industry. The first of the unfair trade practices specified in this code is: Preparing or handling any advertising of an untruthful, misleading, or indecent character, as specified by the following Copy Code formulated and approved by the American Association of Advertising Agencies in conjunction with the Association of National Advertisers:

(1) False statements or misleading exaggerations.

(2) Indirect misrepresentation of a product, or service, through distortion of details, either editorially or pictorially.

(3) Statements or suggestions offensive to public decency.

(4) Statements which tend to undermine an industry by attributing to its products, generally, faults and weaknesses true only of a few.

(5) Price claims that are misleading.

(6) Pseudo-scientific advertising, including claims insufficiently supported by accepted authority, or that distort the true meaning or application of a statement made by professional or scientific authority.

(7) Testimonials which do not reflect the real choice of a competent witness.

Medal to Kelly

Under the auspices of the New York Branch of the American Pharmaceutical Association, the Remington Medal will be presented to Evander F. Kelly, Secretary of the American Pharmaceutical Association, on Wednesday, October 11. A preliminary get-together dinner will be held at the Pythian Temple, 139 West 70th Street, New York, at 6 P. M. Following the dinner the presentation will take place in the auditorium of the New York College of Pharmacy, Columbia University, 115 West 68th Street, at 8.30 P. M. This will permit guests and their friends unable to attend the dinner an opportunity to witness the presentation exercises. Further information and tickets for the dinner at $1.75 per plate may be had by addressing the secretary of the New York Branch, American Pharmaceutical Association, Rudolf O. Hauck, 115 West 68th Street, New York City.

Financial

Earnings and Dividends

AFFILIATED PRODUCTS

Affiliated Products, Inc., reports for June quarter: consolidated net earnings, $76,994, equal to 20 cents a share on 382,800 capital shares, comparing with $160,863, or 42 cents a share, in the first quarter, and with $152,764, or 40 cents a share, in the second quarter of 1932.

AMERICAN HOME PRODUCTS

American Home Products Corp. has declared a monthly dividend of 20 cents a share on its capital stock payable October 2 to stock of record September 14. Previously 25 cents a share was paid monthly. It was stated by the directors that the dividend had been reduced with a view to conserving cash preparatory to the purchase of a competitive concern. The company reported consolidated net earnings of $1,156,686 for the six months ended June 30, after all charges and reserves. This was equal to $1.72 a share on 672,100 capital shares, comparing with $1,150,042, or $2.37 a share for the first half of 1932.

COLGATE PALMOLIVE-PEET

Colgate-Palmolive-Peet Co. reported a net profit of $765,121 for the six months ended June 30, after interest, depreciation, federal taxes and minority interest. This compared with a net of $1,080,711 in the first six months of 1932. The net for the first half of this year was equal to less than one cent a share on 1,999,970 common shares, after six per cent. preferred dividends. It compared with 13 cents a common share in the first half of last year.

MEAD, JOHNSON

Mead, Johnson & Co. reported a consolidated net profit of $441,351 for the six months ended June 30. After preferred dividends, this was equal to $2.31 a share on the common stock, and compared with $539,387, or $2.91 a common share in the first half of 1932.

McKESSON & ROBBINS

After paying off its entire bank indebtedness of $2,750,000, and reducing its outstanding debentures by $715,000 through open market purchases, McKesson & Robbins, Inc. showed the largest cash position in two years, according to its consolidated balance sheet as of June 30, 1933. Current assets, including $3,509,632 cash, amounted to $45,662,742, compared with current liabilities of $6,222,000, a ratio of 7.34 to 1, against a ratio of 5.15 to 1 on June 30, 1932. Inventories amounted to $21,438,179, a reduction of $2,393,680 since the end of last year.

MAGNESIA HYDRATE
Pharmaceutical
REG'D. TRADE MARK.
for

MAGNESIA WAFERS

- The finest magnesia wafers or tablets may now be made easily and economically by using "Pattinson's" Magnesium Hydrate, Pharmaceutical Grade. A uniformly smooth wafer, free from grit and from objectionable or chalky taste can be produced by the use of this highest quality magnesium hydrate.
- TOOTH POWDERS are returning to even greater popularity. An excellent MAGNESIA TOOTH POWDER can be made economically with "Pattinson's" Magnesium Hydrate. May we send you a sample and a suggested formula?
- The fine particle size, intense whiteness, physical and chemical purity of "Pattinson's" LEVISSIMA, Oxide of Magnesia, U. S. P., are of interest to Milk of Magnesia manufacturers. It will give your Milk of Magnesia smooth texture, fine suspension, pleasant taste, excellent color and uniformity.

Also Magnesium Carbonate U. S. P., Powder and blocks.

SCHOFIELD-DONALD CO., INC.
154 Nassau St. New York

Smaller Cosmetic Manufacturers

NRA
WE DO OUR PART

Purchase your raw materials from a source which is specially prepared to serve you now as later, when your demands have increased. We are prepared to furnish you with the same high quality materials as those used by the larger manufacturer. Furthermore, we offer you a continuity of service well equipped to take care of all your requirements and give you the benefit of lower prices, as these requirements become larger. For meeting your smaller needs we offer:

		Price per lb.
Beeswax, U. S. P., Sunbleached discs.	5 lbs.	42c
Super Cocoa Butter, odorless	5 lbs.	50c
Ceresin, best white imported	5 lbs.	45c
Cosmetics Ochre, for Rachels	1 lb.	$1
Gum Paragon, for Waveset	5 lbs.	50c
Lanolin, U. S. P., anhydrous	5 lbs.	35c
Magnesium Carbonate, U. S. P.	5 lbs.	20c
Stearic Acid, triple pressed	5 lbs.	25c
Spermaceti	5 lbs.	35c
Talc, best Italian	10 lbs.	12c
Titanium Dioxide, pure	5 lbs.	40c
	10 lbs.	35c
Zinc Stearate, U. S. P.	5 lbs.	40c
Zinc Oxide, U. S. P.	5 lbs.	30c
	10 lbs.	25c

All quotations f. o. b. N. Y. Full list of materials on request.

R. F. REVSON CO.
91 Seventh Avenue New York
Specializing in
Chemicals for the Cosmetic Industry

WEST COAST REPRESENTATIVE
J. W. LESER & CO., 1001 E. First St., Los Angeles, Calif.

Why so many leading cold-cream manufacturers USE

BEEHIVE BRAND BEESWAX

First, because Beehive Brand Beeswax is pure—the finest that money can buy. In many cases, a smaller amount is used in the cream than is required of ordinary beeswax, and with better results.

Our own buyers select the finest grade of crude beeswax. It is critically examined at the source and again carefully tested for purity and quality by our chemists. Beehive Brand is then sun-and-air bleached—a method that is slower and more costly but infinitely better than ordinary chemical bleaching. This work is done by and under the direction of veterans, many with more than 45 years of service.

Specify Beehive Brand for your next order of beeswax.

WILL & BAUMER CANDLE CO., Inc.
Syracuse, New York Est. 1855

SPERMACETI CERESINE
GLYCERINE STEARIC ACID RED OIL

A Hurry Call—

Customer telegraphs that he has trouble and needs assistance.

Response—

A member of Benkert's organization is on the train and at his desk the next morning to help him out by expert advice.

•

To continue this kind of service we have opened a BALTIMORE OFFICE in charge of

Mr. Russell Stoddard

well known in the Crude Drug and Essential Oil field.

•

W. BENKERT & CO.

INCORPORATED

Crude Drugs • Cosmetic Crudes

100 Gold Street New York City

Other Offices: DETROIT—CHICAGO—ST. LOUIS

Net sales of the company for the six months ended June 30 totaled $18,874,789, a reduction of $4,257,539, or 8.01 per cent., as compared with the corresponding period last year. After a large reserve for bad debts in conformity with the company's policy of setting up all possible reserves against losses, a combined loss of $381,356 was shown for the period, after selling and general expense, depreciation, interest and amortization and foreign income taxes. This compares with combined profits of $84,075 for the same period last year, which figure, however, included excess provision for prior income taxes.

F. W. D. A. Meeting

Federal Wholesale Druggists' Association will hold its eighteenth annual convention at Stevens Hotel, Chicago, September 25 and 26.

Present officers of the association include:—President, O. J. Cloughly; vice-president, W. S. Krupp; treasurer, G. A. Raab; secretary, R. E. Lee Williamson; chairman of associate members, Percy C. Magnus; general counsel, E. C. Brokmeyer; and sergeant-at-arms, Paul Pearson. Members of the executive committee include:—J. J. Dreyer, A. E. James, F. W. Alexander, N. D. Parker, and D. W. Osterland.

N. W. D. A. Meeting

National Wholesale Druggists' Association will hold its fifty-ninth annual convention at French Lick Springs, Ind., October 1 to 5. There will be a reception Monday evening, in honor of President and Mrs. Carl F. G. Meyer and on Thursday evening the association's annual banquet will take place with J. K. Lilly acting as toast master and Dr. Gustave W. Dyer, professor of economics at Vanderbilt University, as the guest speaker.

Salesmen's Golf

Salesmen's Association held its final golf tournament at the Shackamaxon Country Club, Westfield, N. J., September 12.

C. S. Benjamin, Swan Chemical Co., won the members' low gross with an 83, J. M. Alvarez, Grasselli Chem. Co., trailing with an 88, and W. D. Merrill, Joseph Turner & Co., making 92 for third prize.

In the low net for members F. S. Dubbs, American Cyanamid & Chemical Corp., was first, B. J. Gogarty, Rossville Commercial Alcohol Corp. was second, and F. W. Green, National Aniline & Chemical Co. was third.

In the putting contest, Oscar Lind, of the Dow Chemical Company, tied with Dr. W. E. Holmes at 16, D. C. Scott of the Du Pont company placing second with 17. Charles Kelly of Hagerty Brothers had two balls on the green in the hole-in-one contest, while C. S. Benjamin was closest to the pin.

B. H. Smith Corp. Formed

B. H. Smith Corp., 100 Fifth ave., New York, has been organized to do business in essential oils, aromatic chemicals and perfume specialties. F. A. Jones is president of the corporation, and will be in charge of sales. George J. Tomback is vice-president, and will be in charge of the laboratory.

Mr. Jones and Mr. Tomback were for some years associated with van Ameringen-Haebler, Inc., later being associated with H. C. Ryland, and still more recently with Bel-May.

Obituaries

Robert Augustus Chesebrough

Robert Augustus Chesebrough, founder of the company bearing his name and author of the trade-mark, "Vaseline," died in Spring Lake, N. J., September 8, aged 96.

In 1876 he incorporated his business as the Chesebrough Manufacturing Co., with a capital of $500,000, engaged in producing kerosene and lubricating oil products, but after 1881 the company confined itself to making vaseline, and has done so ever since. He retired as president about twenty years ago, but remained as a director. He established branch offices and distributing depots in London, Paris, Berlin and Montreal.

Francis R. Simpson

Francis R. Simpson, assistant sales manager, United Drug Co., Boston, died in Newton, Mass., September 9, aged 33.

J. L. Matthieu

J. Lafayette Matthieu, manufacturers' representative in the Detroit territory for Schofield-Donald Co., New York, and Bond Manufacturing Corp., Wilmington, died in Detroit, August 6, at the age of 52.

Charles L. Robertson

After an illness of six months, Charles L. Robertson, advertising manager of Merck & Co., Inc., died on August 12th at his home in Jamaica, Long Island.

Born in Brooklyn in 1874, he gained his early experience as a compositor, joining the publishing department of the Merck organization in May 1899. He increased his field of activity as the company expanded during the early 1900's and became advertising manager shortly after the turn of the century.

During his long association with Merck & Co., he devoted his abilities to the familiarizing of the medical profession and the drug trade in general with the House of Merck and the many ramifications of its business.

Among his achievement were the development of Merck's Report, a quarterly directed to the interests of the practising pharmacists, and the inauguration of the "Know-Your-Druggist-Better" campaign which emphasized the importance of the local pharmacy to the community. Among his last undertakings was the planning of the Merck Exhibit at the Chicago Century of Progress Exposition, a work which he was unfortunately not able to see completed.

Robert J. Kideney

Robert J. Kideney, founder and first president of The Wildroot Co. cosmetics, Buffalo, N. Y., died August 20 at his home in Ontario, Calif., where he had lived for the last ten years, or since his retirement from active business in Buffalo. He was sixty-three years old and a native of Toronto, Canada.

At Golf Tournament

Shown above are some of the contestants at the golf tournament of the Michigan Cosmetic and Extract Association held at the Lakewood Golf and Country Club, Ontario, Canada. From left to right they are: Hugh J. Crossland, G. Beeman, W. Elliott, C. Harvey, E. P. O'Rourke, J. Gauer, W. J. McDonald, T. D. Shea, H. E. Brown, Glen Hays.

MANUFACTURERS OF

PHARMACEUTICAL and COSMETIC WHITE OILS and PETROLATUMS

● WHITE OILS, U. S. P.

HEAVY-LIGHT

We manufacture and offer the highest grades of U. S. P. White Oils obtainable. They are absolutely odorless, tasteless and colorless.

Our list of these oils covers a wide range of viscosities and a wide range of gravities.

Any Viscosity ..... *From* 50 to 345 Saybolt @ 100° F.
Any Gravity ..... From .820 to .900

MARCOL **WYROL** **PRIMOL**

Brand names which are a guarantee of finest quality.

These oils have for years set the standard for the best in White Oils. PRIMOL for *Pharmaceutical purposes and* MARCOL *and* WYROL *for* COSMETIC *and* TOILET Preparations are used throughout the world by the manufacturers of the finest preparations.

● WHITE OILS, INDUSTRIAL

HEAVY-LIGHT

A similar wide range of viscosities and gravities is offered in our list of colorless Industrial White Oils. Any viscosity or gravity in the above range is available.

In the general manufacture of cosmetic and toilet preparations these White Oils find widespread use. An outstanding value is offered in the popular brand:

BAYOL

Saybolt viscosity @ 100° F.	80/90
Specific gravity	.845/.855

● PETROLATUMS, U. S. P.

	Melting Point A. S. T. M.
Snow White Parmo No. 1	125/129° F.
Snow White Parmo No. 2	115/120
Lily White Parmo	115/120
Ex. Light Amber Parmo	115/120
Amber Parmo	115/120

Parmo is our brand name for Petrolatum and is very well known to pharmaceutical, cosmetic and toilet preparation manufacturers, having a well established reputation over a long period of years for quality and uniformity.

All products are guaranteed as to quality and uniformity. Specific information and *experimental samples furnished on inquiry. Our technical staff will be pleased to* assist you in your problems.

STANCO DISTRIBUTORS, Inc.

2 PARK AVENUE, NEW YORK, N. Y.

Plant, Bayway, N. J. **Warehouse, Chicago, Ill.**

Raw Material Markets

Chemicals **Essential Oils** **Natural Products**
Drugs **Medicinal Oils** **Flavors**

Cod Liver Oil Firmer

A firmer undertone is developing in cod liver oil as the heavy consuming season draws near. Exchange is also steadier keeping the replacement market in a stable position. Prices in this market were continued unchanged at from $26.00 to $28.00 per barrel as to brand offered.

The Department of Commerce reports that imports of cod liver oil into the United States during the past five years have steadily decreased, the 1932 tonnage equaling only one half of that of 1928. However, the decrease in the dollar value was even more marked, having declined from $2,517,000 in 1928 to $804,000 in 1932. The decrease in imports exceeding 2,000,000 gallons while probably due principally to prevailing economic conditions, may also be attributed in part to the use of certain domestically manufactured preparations, such as vitamin concentrated products of the viosterol type and the more recent "hal-liver" oil preparations that have come on the market.

Unrevised statistics of exports of cod liver oil from Newfoundland indicate a decrease to 6,093 imperial gallons for the period January 1 to July 14, 1933, from 10,790 gallons for a like period in 1932. For the same period in 1933 common cod oil shipments increased to 360,157 imperial gallons from 205,340 gallons in 1932.

There is a considerable production of seal oil in Norway, which does not figure in statistics. It is said that this oil, though of questionable biological value, nevertheless is blended up to the extent of 10 per cent. with cod liver oil by unscrupulous dealers. It is claimed that a vitamin content test would not be conclusive, because there is an appreciable variation even in absolutely pure cod liver oils. However, it is said that the Norwegian Government's control is as thorough as it can be made and that the officials connected therewith can be counted on to do whatever they possibly can to eliminate fraud. (Consul Thomas D. Davis, Stavanger, Norway).

Citric Acid Quieter

Trade in citric acid showed a seasonable decline but the price structure was firm in all respects as this item is at a low level and has not been advanced in line with the general tendency of all raw material items. The price situation, therefore is as strong as it has been during the period of largest consumption.

Prices and Imports

Prices are still hesitantly awaiting developments. The index of 50 raw materials in September stood at 60.8, compared with 60.5 in the previous month, and 61.0 in July, the high for the year.

Medicinal chemicals were priced at 65.6 in September, as against 65.5 in August. Bismuth, iodine, mineral oil were quoted higher, menthol lower.

Essential oil prices advanced to the high for 1933, 47.0 in September contrasting with 46.4 in August. Peppermint declined, but lavender, geranium, cloves and bergamot were higher.

The botanical index, reflecting the mixed trend, sagged a little to 71.9 in September from 72.0 in the previous month. Belladonna and ergot went up; buchu, digitalis, gentian, rhubarb, went down. Receipts of new crop goods are largely responsible for the decline.

Cosmetic raw materials averaged lower prices in September, 65.5, compared with 66.2 in August. Balsam copaiba, Japan wax, menthol, and quince seed were quoted lower; ceresin, mineral oil and petrolatum were quoted higher.

According to latest advices, monthly data of imports will be continued by the Bureau of Foreign and Domestic Commerce until December, after which only quarterly reports will be issued.

Essential oil imports for June were valued at 51.3, the quantity figure being 86.9. In May, corresponding indexes were 47.0 and 116.1, respectively.

Quantities of botanicals imported in June were 67.0, against 99.4 in May. Value stood at 53.6 for June, against 43.2 in May.

Alcohol Moves Well

Alcohol trade during the past month was in good volume. A further upturn in trade is expected to get under way shortly when shipments start to cover requirements of the anti-freeze trade.

The price structure was firm in all respects. A decrease in surplus stocks contributed to the strong undertones noted.

Quotations for delivery during the period July 1 to September 30, 1933 on the principal formula are as follows:

	Carloads drums	*Single drum price*
No. 1 spec	.335	.415
No. 5 comp	.34	.42
23 A spec	.37	.49
39 B spec	.38	.50
40 M spec	.34	.46

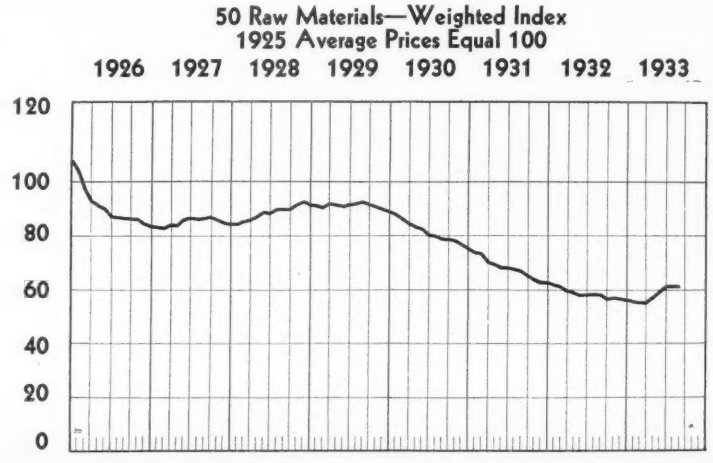
Prices quoted are f. o. b. works.

Mercury Price Holds

The mercury market is without new feature. Price on spot held at recent advanced levels of from $64.00 to $65.00 per flask although a small volume of business was reported. The market continues to be supplied mostly from imported stocks so that firm undertones prevail in keeping with the position abroad. Domestic production continues small and unimproved.

Mercurials Unchanged

No change is noted in the mercurial group although the market as a whole is quite firm in keeping with the cost of raw material. A good demand was noted for calomel.



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Isdahl & Co. announce a new method of refining Cod Liver Oil which completely revolutionizes former methods of refining and which produces a medicinal grade of Cod Liver Oil with no loss of Vitamin A potency.

For 70 years Isdahl & Co. have been known as progressive refiners of Cod Liver Oil. During the last several years when rapid strides have been made in producing a clear, odorless, colorless oil, Isdahl's brand has had a wide reputation as the finest Medicinal Cod Liver Oil.

With the growing knowledge of the vital importance of vitamins and the discovery of the high vitamin potency of properly refined Cod Liver Oil, Isdahl & Co. have been working to discover a method of refining which would preserve the full potency of the vitamin as found in the liver oil of freshly killed fish.

The development of the vacuum process, which avoids the oxidation so injurious to Vitamin A, has accomplished this. Ten Isdahl producing plants are now equipped to operate under this new process. They are sending to America the finest medicinal Cod Liver Oil yet produced, with a potency of Vitamin A uniformly maintained at a higher content than ever before known in Cod Liver Oil.

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Camphor Prices Easier

Demand for spot camphor continued to lag witl resulting increase in the competitive factor. Prices eased somewhat now being quoted at from 47c to 48c per pound for slabs, 53c to 54c for tablets and powdered at 48c to 49c. Prices in primary continued to show some swing to importers favor.

Synthetic camphor imports into the United States registered a decided drop in the first half of 1933, when 206,041 pounds were brought in, compared with 1,128,240 pounds in the corresponding period of 1932. Comparative data for imports of camphor during the January-June period of recent years follow:

	Natural	*Crude*	*Natural*	*Refined*
Jan.-June	*Pounds*		*Pounds*	
1931	743,168	$276,669	686,634	$330,250
1932	1,125,922	321,658	784,669	283,010
1933	866,667	165,286	813,081	227,748
			Synthetic	
			Pounds	
1931			1,055,155	$350,614
1932			1,128,240	314,808
1933			206,041	48,497

Bismuth Salts Up

With bismuth metal advancing to the basis of $1.25 per pound, leading producers of the various bismuth preparations have advanced spot quotations on these items accordingly. The new schedule follows:

Bismuth subcarbonate U. S. P.	100 lb. keg	$1.65	per pound
	5 lb. tin	1.75	" "
Bismuth subgallate U. S. P.	100 lb. keg	1.65	" "
	5 lb. tin	1.75	" "
Bismuth subnitrate U. S. P.	250 lb. bbl.	1.40	" "
	5 lb. tin	1.50	" "
Bismuth subsalicylate	100 lb. bbl.	2.45	" "
	5 lb. ctn.	2.54	" "

Menthol Unsettled

Menthol continued unsettled throughout the greater part of the past trading period. Prices suffered a sharp reduction leading factors here now offering this material at $2.90 per pound in case lots and $3.10 for smaller quantities.

The market here has been very dull for some time now. Leading consumers seem to be well covered and the small lot business ran into competition. Replacement costs fluctuated in keeping with the movements in foreign exchange.

Caffeine Advanced

A recent advance in caffeine was made necessary by the prices prevailing for raw material and the increased cost of labor and distribution. Caffeine alkaloid U. S. P. in 100 pound drums sold at $2.20 per pound. Caffeine citrated U. S. P. in 25 pound cans was quoted at $1.85 per pound.

Phenobarbital Lower

Phenobarbital was reduced $1.00 per pound now being offered at from $5.50 to $5.55 as to quantity. The movement placed this item in a still more competitive position with barbital. Demand was good and promised to expand.

Bromides Higher

As a result of higher manufacturing costs, bromides have been advanced and are now quoted.

Ammonium Bromide U. S. P., 450 lb. bbls. incl. 39c per lb.

Potassium Bromide U. S. P. crystal or gran 400 lb. bbl. incl. 35c per lb.

Sodium Bromide U. S. P. granular 500 lb. bbl. incl. 35c per lb.

Strontium Bromide U. S. P. IX cryst. or gran. 150 lb. keg incl. 50c per lb.

The market is quite firm at the advance and the leading factors are not entering contracts at present.

Iodine Sharply Lower

Due to a change in the European Syndicate, prices on crude iodine have been reduced sharply, amounting to about 40 per cent. To meet this competition from Europe, the local representatives of the Chilean producers have marked down their price to 15s 1d per kilo.

During June, total imports of crude iodine into the United States were 1,102,404 pounds with a value of $2,511,169 which compares with 33,310 pounds valued at $117,667 for the corresponding month of 1932, and 631,669 pounds valued at $2,225,661 for the entire year 1932.

In line with the developments in crude material, iodine preparations were also reduced by leading producers here. Resublimed U. S. P. is now quoted at $2.10 per pound in 25 pound jars, and potassium iodide U. S. P. at $2.00 per pound. Sodium iodide U. S. P. is offered at $2.75 and tincture at $3.00.

Tartaric Acid Firm

The price of domestic tartaric acid was firm in all respects throughout the past month, and the market was moderately active. Demand from the soft drink trade was slower but that was a seasonable expectation. All spot business went to suppliers of the domestic material as the high import costs made it impossible to do business with the foreign material.

Mineral Oil Higher

Prices for imported mineral oil advanced during recent trading and the item was reported fairly active on the rising market. The following prices are now the schedule:

335-345	vis.	93c	per gallon
185-195	"	86c	" "
160-170	"	83c	" "
130-140	"	79c	" "

At the advance levels the market presented a firm undertone. No contracts are being accepted for delivery beyond the first of the year.

Domestic oil sellers have also revised their schedule and now quote:

75-85	"	70c	" "
80-90	vis.	53c	per gallon
125-130	vis.	74½c	" "
320-330	"	84½c	" "

Glycerin Very Firm

Undertones in C. P. glycerin continued very firm with the spot market at 10¼c per pound. Contributing to this position was a total absence of spot competition, absence of weakness in the crude material and the approach of the larger consuming season which lies just ahead when the anti-freeze consumption gets fully underway.

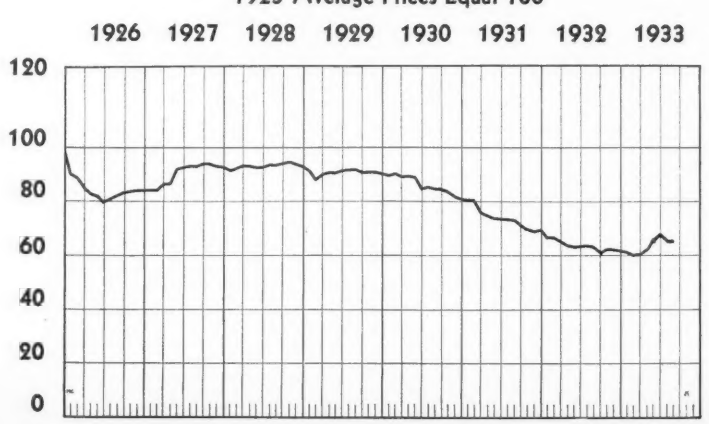
Imports of crude glycerin into Germany during the first six months of 1933 declined to 9,073 metric quintals from 22,416 in a like period of 1932, and exports of the refined product also dropped to 10,286 quintals from 15,321.

United Kingdom exports of glycerin, both crude and distilled, dropped in the first half of 1933 compared with the corresponding period of 1932. Imports of crude glycerin were four times the corresponding 1932 figures.

Ether Quoted Higher

With production costs tending upward because of increased labor costs and advance in raw material, leading factors in ether manufacturer have advanced prices. U. S. P. is now quoted in drums at 12c per pound and anaesthesia in drums at 24c per pound.

15 Medicinal Chemicals—Weighted Index
1925 Average Prices Equal 100



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NEW YORK QUININE & CHEMICAL WORKS
101 North 11th Street
Brooklyn, New York

SWANN CHEMICAL COMPANY,
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THE HARSHAW CHEMICAL COMPANY,
Cleveland, Ohio

PACIFIC COAST SERVED BY

Products Department CALIFORNIA FRUIT GROWERS EXCHANGE, Ontario, California

Lavender Sharply Higher

One of the features of the essential oil market was the sharp advance in spot price of lavender. The U S P oil was up to from $1.90 to $3.25 per pound as to quality of material offered and this price in some quarters was said to be practically a nominal quotation in view of the almost total absence of stocks here.

Foreign market reports on the new crop have been adverse in the main and due to the uncertainty some shippers have advised local representatives to stop quoting prices. It is said in some quarters that total production will be about one quarter the amount produced last year. In view of this holders of oil will not accept contracts for delivery beyond the first of this year.

Spike Spanish oil is also firmer at from 57c to 80c per pound as to quality offered. This item is said to have previously been offered below replacement cost and in view of the firmer market for the U S P article leading trade factors have firmed up in their attitude.

Peppermint Lower Again

The past month has seen a continuance in the downward trend in oil peppermint. Spot prices are now on the basis of from $2.50 to $2.70 per pound for natural oil, with the redistilled offered at from $2.85 to $3.20 per pound.

The market, late in the period, presented more stability however. It would seem that the declining tendency has been checked at the present values. Demand was small and the market dull at this writing. The sharp fluctuations that characterized this item during the past two months has created a waiting policy on the part of most of the larger consumers. Few sales were made during the past several days—the policy seems to be to await the next move.

The new crop is said to be about complete and reports indicate that a more satisfactory yield will be obtained than earlier estimates had indicated.

Spearmint Price Off

Oil spearmint acted in sympathy with the situation in the mint oils generally and was offered both in the primary and on spot at lower figures. The range here was from $1.15 to $1.35 per pound. The new crop is said to be excellent in quality and production up to early estimates.

Bois de Rose Strong

Sellers of bois de rose continued to be reserved in offering this oil in view of the upward tendency of replacement costs. Stocks in the primary market are small and not at all freely offered. No open change was noted here but the market presented a strong undertone.

Clove Oil Firmer

With no further declines noted in raw material the spot market for clove oil took on a firmer aspect. There was a very fair sized request for prompt delivery and the price structure was said to be firm at unchanged levels. Contract deliveries were in good volume.

Wormwood Oil Steady

With a good part of the new production of oil wormwood already placed under contract the market assumed a much firmer tone. Prices were advanced to the basis of from $3.25 to $3.50 per pound. Sales, however, were said to be moderate.

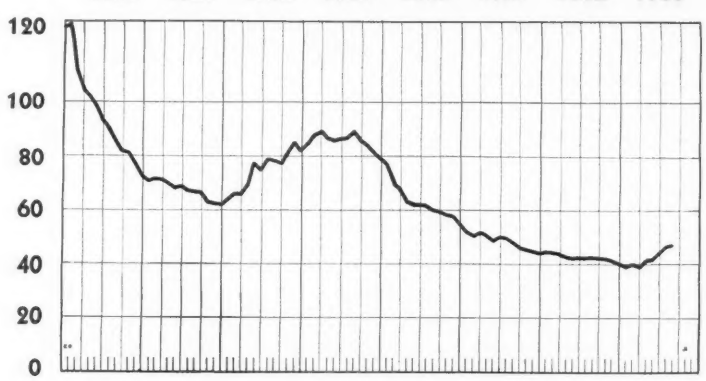
Bergamot Prices Maintained

The spot bergamot market was quite firm in keeping with the strength noted in exchange and recent advances in this item were well maintained. Demand was for prompt requirements in most cases. Prices ranged from $1.70 to $1.95 per pound.

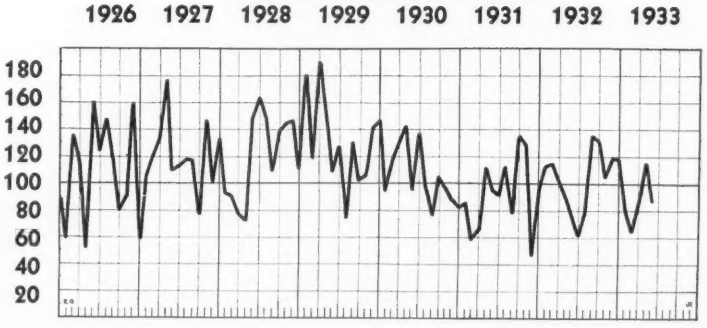
Anise Oil Dull

Trade needs of oil anise were not very large during the past month. Prices on spot remained very firm however as material is in strong hands and not of exceptional size. U. S. P. oil ranged from 44c to 47c per pound.

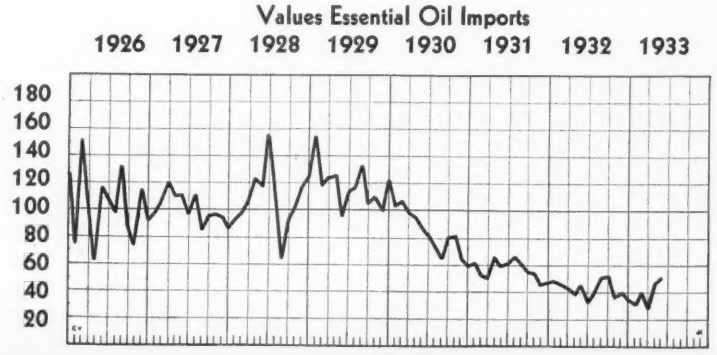
15 Essential Oils—Weighted Index
1925 Average Prices Equal 100



Quantities Essential Oil Imports
1925 Monthly Average Equals 100
Adjusted for Seasonal Variation



Values Essential Oil Imports



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Citronella Quiet

Oil citronella was rather neglected in spot trading during the past month. Ceylon oil is unchanged at 40c in drums. An occasional inquiry for Java oil confirmed the market at 52c per pound in drums.

According to an article appearing in the "Economisch Weekblad" of May 26, 1933, change is in progress in the market position of Java citronella oil. Monthly exports steadily increase while the price declines. After the overproduction during 1926, 1927, and 1928, and the stabilization in the years 1928 and 1929, the market for citronella oil was marked by a comparatively quiet tendency. The sharp price decline experienced by most commodities during the last three years did not effect citronella oil to the same degree. However, it appears that for the first quarter of 1933 the position of citronella oil is becoming less favorable and that the price is moving downward. The table below gives a summary of the exports of Java citronella oil in the years 1927 to 1932 inclusive:

Exports of Citronella Oil
(In Metric Tons)

	1927	*1928*	*1929*	*1930*	*1931*	*1932*
Europe..	881	711	451	466	519	500
America .	312	317	298	221	236	367
Asia.....	99	99	98	114	113	119
Australia	13	11	11	10	14	6
Other countries	8	1	4	4	4	....
Total..	1,313	1,139	862	815	886	992

Exports for the first three months of 1933 equaled 324 metric tons. The United States is by far the leading buyer, followed by France, Italy, Germany, Japan, the Netherlands, and China. In 1933 exports have increased as compared with the corresponding period of 1932 by nearly 48 per cent., and when compared with the average monthly exports in 1932, by approximately 31 per cent. (monthly average in 1932 was 82.5 metric tons).

It is assumed that in 1927 and 1928 the exports did not balance consumption, whereas during 1929, 1930, 1931, and perhaps also in 1932, this has been so. The price resistance of citronella oil during this period would indicate that the supply did not equal the demand. In 1932 exports were about 12 per cent. larger than in 1931, whereas the price decreased only about 7½ per cent. From this one may gather that the increase in production which took place in 1931 and 1932 has not been abnormally large. The demand seems rather elastic and stimulated by lower prices. Citronella oil is used on a larger scale for the perfuming of soap, therefore when the price is down citronella oil use usually expands. The annual averages of the prices of Java citronella oil at Batavia for the past six years is shown below:

Average Prices of Citronella Oil per Kilo
(Including Drum) in Florins

1927	*1928*	*1929*	*1930*	*1931*	*1932*	*1933 (3 mos.)*
1.85	2.05	2.85	2.67	2.26	2.09	1.80

The United States value of the florin for the period 1927 to 1932 inclusive and the first three months of 1933 ranged from $0.401 to $0.403. It appears that the average price for 1932 gave a profit to the producers, causing a considerable extension of the planting of sereh grass in 1932. It may be said, in general, that in the years 1929 to 1932 inclusive the price movement was not unfavorable to the producers.

Exports during the month of July 1933, Java oil amounted to 120 tons. Total January to July 1933 amounted to 753 tons.

Department of Commerce reports the dollar value of essential oil imports were less for the first six months of 1933. Imports into the United States for the above period had a declared value of only $1,285,000, a decrease of $210,000 from a like period of 1932. The decline in declared value, however, was not so great as the difference in the six month period of 1931 and 1932, when the declared value fell from $1,937,000 to $1,495,000.

French Guinea Orange Oil

It was only toward the end of 1932 and the beginning of this year that French Guinea orange oil gradually became a really important factor in the market, reports "The Chemist and Druggist." There was at first, in this country at any rate, the usual prejudice against an oil from a new source, but the inordinately low prices at which it was offered induced consumers to consider it seriously. Results differed considerably, largely because qualities varied, and arrivals are still not uniform. Citrus oils are all more or less liable to oxidation, and orange oil is possibly one of the worst in this respect. The production, cleaning, transport and shipment of orange oil in the tropical climate of West Africa obviously provide a host of difficulties, and may be accepted as an explanation of the wide variations in quality of some of the oil shipped to Europe. It has sometimes been said that oil from this course will not keep. Experience has shown that, provided the quality is right to begin with, it will keep in satisfactory condition equally as well as orange oil from other sources.

With regard to prices, it does not seem likely that we shall see again the fierce competition and ridiculously low prices touched in the early part of this year. There were various reasons to explain this uneconomic price: (1) the general depression; (2) the necessity of inducing buyers to interest themselves in a new product; (3) a price-cutting war between the important shippers which had the secondary, but not unimportant, object of eliminating the smaller firms and the inferior qualities; (4) the importance of increasing the world consumption of orange oil. As far as can be ascertained, all of these objects have been attained, with the exception of the complete elimination of inferior qualities, and prices are now about 75 per cent. above the lowest.

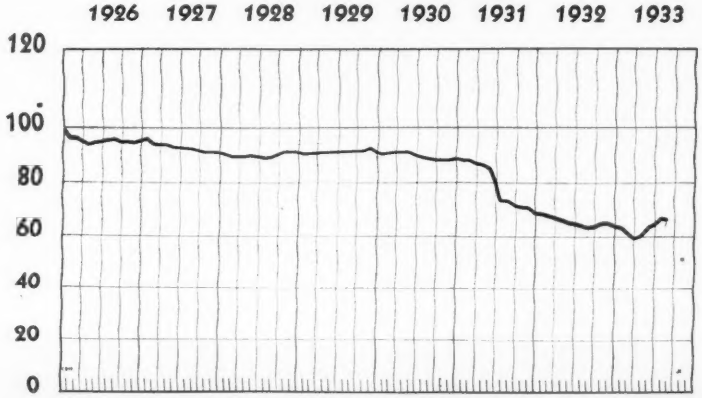
There are two crops a year in French Guinea, one small one in the summer (August-September) which produced nearly twenty tons of oil last year and, in spite of pessimistic forecasts, is likely to produce just about as much this year. The main crop commences towards the end of November and continues in full swing for about three months. The winter crop last year amounted to 105 tons in all. In view of this hugh figure it is hardly surprising that shippers at first sold at extremely low prices. It may well be that the present summer crop will prove ample to supply requirements up to the end of the year, and that the production for December-March will reach the present estimate of about 90 to 100 tons (which is about one-third of the world's annual consumption of orange oil).

The spot price of this oil in New York during the past month ranged from $1.15 to $1.20 per pound.

Caraway Oil Higher

Oil caraway is higher at from $1.95 to $2.00 per pound representing an advance of 10c. This reflected a firm primary market. Insect pests abroad are said to have threatened reduction of the new crop.

25 Cosmetic Raw Materials—Unweighted Index
1925 Average Prices Equal 100



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Lemongrass Oil Firm

The spot market for oil lemongrass held to a firm position because replacements were made necessary at the time of the generally advancing market not far back. Some easier tendency is likely to develop it is said when present stocks move into consumption as the primary market is somewhat easier now. Spot quotations ranged from $1.05 to $1.40 per pound.

Rothschild In Essential Oils

A consular report from Jerusalem states that the local essential oil industry has been extended by Baron Edmond de Rothschild by the establishment of a company with a capital of £15,000 to produce essential oils for the manufacture of perfumes and drugs. A small temporary factory has been established in the colony of Petach-Tikvah, northeast of Java, for the production of mimosa, rose geranium, and lemon. At Zichron-Jacob a laboratory has been set up, and plantations of roses, jasmin, tuberose and several medicinal herbs, such as belladonna, have been laid down at Shuny nearby. The co-operative citrus oil factory at Rhenhoboth is now in the first year of its operation, the 1933 season's output being estimated at from 1,000 to 1,500 pounds of orange oil.

Beeswax Prices Firm

Beeswax prices were firm in all respects on spot but without open change. The position for the most part reflected the relatively strong replacement position for all kinds of material.

Total exports of crude beeswax from Cuba for the four year period 1928 to 1931 and the quantities shipped to the United States are given below:

	Total Exports		*Exports to United States*	
	Pounds	*Value*	*Pounds*	*Value*
1928.....	508,921	$148,532	423,647	$136,045
1929.....	608,821	166,456	599,790	163,693
1930.....	556,743	140,807	541,855	139,626
1931.....	1,282,556	146,226	653,614	122,157

Tansy Oil Supply Small

Although production of oil tansy was said to be conservative it is not likely there will be an actual shortage. Demand here was routine but prices well maintained in view of the primary market position, the oil being firmly held there. Prices continued firm at unchanged levels ranging from $2.00 to $2.05 per pound.

Juniper Demand Heavy

The generally expanding market that is expected to develop in juniper berry oil with the repeal of prohibition has already affected this item to the extent that quite firm undertones prevailed during the past trading period. As yet the market is unchanged from previous levels but some expect a price rise when demand shall develop.

Wormseed Oil Strong

It is generally agreed that new crop oil wormseed will only be obtained at a rising cost. Low prices in this item over a long period have curtailed production to the extent that primary market holders are not offering freely. The tendency seems to be to await further developments both on the part of buyers for consumption and sellers. Spot oil ranged from $2.20 to $2.10 per pound.

Pennyroyal Oil Higher

Imported oil pennyroyal was higher on spot and continued to reflect the rising cost to import. Quotations here ranged from $1.45 to $1.60 per pound. Adverse reports concerning production this year have been received. The Domestic oil showed a firm undertone and the recent higher prices were maintained.

Cedarwood Oil Steady

Production of cedarwood is said to be about even with requirements. In view of a good export demand the item has firmed up in the primary market. This condition was reflected into the spot market where dealers were compelled to ask more. Prices ranged from 31c to 35c as to seller and quantity.

Carnauba Wax Lower

Lower prices are noted for carnauba wax in the spot market. Quotations were lowered to the basis of from 27½c to 28½c per pound for number one grade. This was the result of an inactive buying movement. Cables from Brazil, however, continued firm but trading in this market was not of sufficient volume to lend any support to the general tone.

Sandarac Gum Up Sharply

A sharp advance is noted in gum sandarac. Leading factors on spot asked from 27c to 28c per pound and held material firmly at these levels. During late trading the tendency was to advance still higher. This item is in small supply on spot with few holders. Demand was very good.

Mastic Gum Dull

Demand for gum mastic was slow during late trading. First hands however maintained their asking prices on the basis of from 30c to 35c per pound although it was said that in certain quarters material was offered at slightly below these figures.

Benzoin Gum Steady

Gum benzoin continued steady after recent advances. Inquiry was slightly more active and sales gained moderately. Prices held firm at from 22c to 24c for Sumatra, with Siam quoted at from $1.05 to $1.30.

Arabic Gum Quiet

The spot market for gum arabic is without new feature other than that a more quiet tendency is noted. The larger consumers covered a fair portion of their future requirements during June and July trading and hence were aloof from the market. In view of the continued higher replacement costs, however, the market here was maintained at levels reached during the recent advance and showed little tendency to soften. In most quarters amber sorts was quoted at 8c per pound minimum.

Boxall & Co. report exports from the Sudan for June, 1933, totalled 1,160. tons, compared with 681 tons in June, 1932. Shipments for the period January-June, 1933, totalled 8,711 tons, compared with 9,357 tons for the first half of 1932. The chief destinations were as follows:—

	1932		
Destination	*Jan.-May*	*June*	*Total*
Great Britain.....	2,151	210	2,361
U. S. A.....	1,111	115	1,226
France.....	1,388	180	1,568
Germany.....	934	37	971
	1933		
Destination	*Jan.-May*	*June*	*Total*
Great Britain.....	1,531	235	1,766
U. S. A.....	1,295	294	1,589
France.....	713	148	861
Germany.....	1,118	171	1,289

The Export figures are made up of the following qualities:—

	Tons			
	Hasabb	*Bleached*	*Talha*	*Total*
June, 1932.....	638	15	31	684
June, 1933.....	1,304	24	132	1,460
Jan.-June, 1932...	8,788	75	494	9,357
Jan.-June, 1933...	7,945	77	689	8,711

Vanilla Beans Unchanged

Prices on vanilla beans remained steady throughout the recent trading period in spite of the fact that demand during late trading tended to lag. Although a smaller crop of Mexican beans is anticipated no higher prices are expected as consumption of this grade has shown a declining tendency for some time now in favor of the Bourbons which sell at much lower prices. In all respects the market was without open price change.

Tragacanth Gum Firm

Firm prices but smaller demand was the feature of the gum tragacanth market. Strength in the replacement market held quotations to top prices reached during the recent movement. The wave of buying which characterized this item a month ago when values were advanced sharply has now subsided leaving the item in a dull but firm position.

Karaya Gum Unsettled

Some unsettlement in values was noted in the spot market for gum karaya. Prices for powdered gum ranged from 9c to 25c per pound as to quality. Grading is a factor in the wide quality price range of this item.

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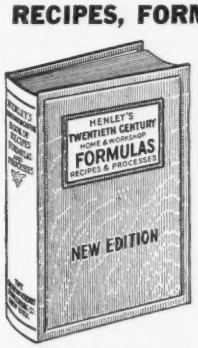

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Botanical Prices

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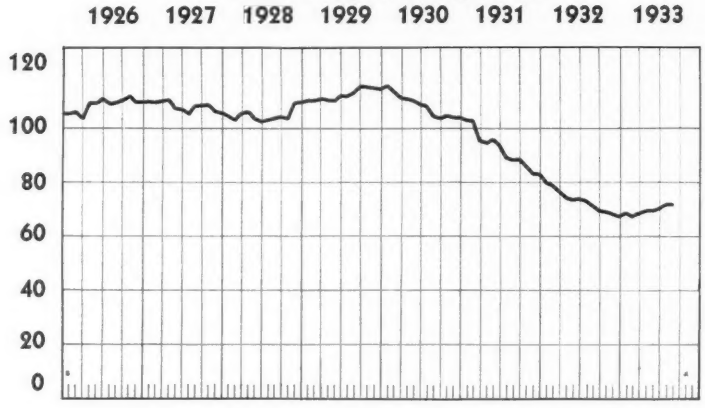
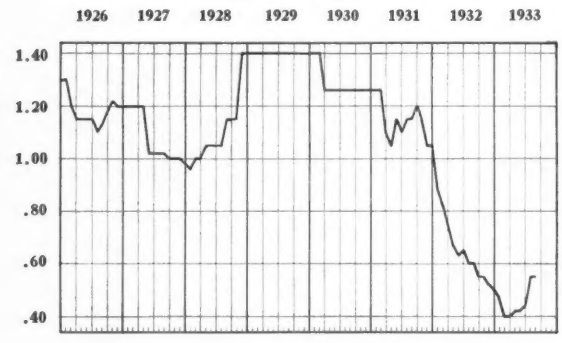
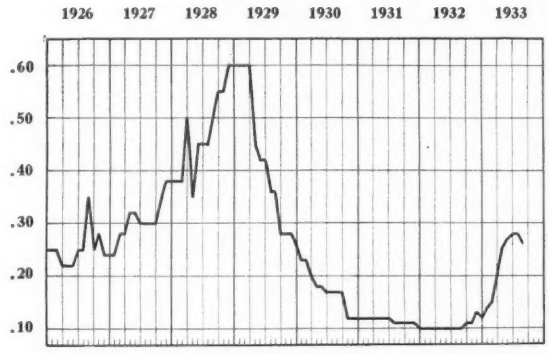
15 Botanicals—Weighted Index
1925 Average Prices Equal 100



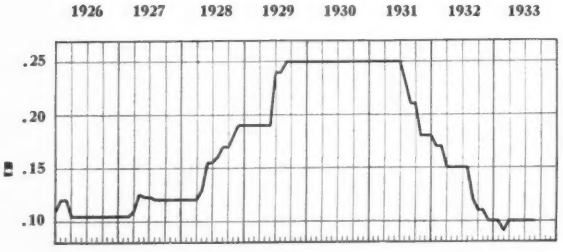
Agar Agar



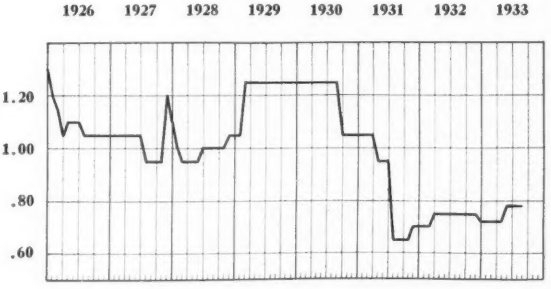
Digitalis Leaves



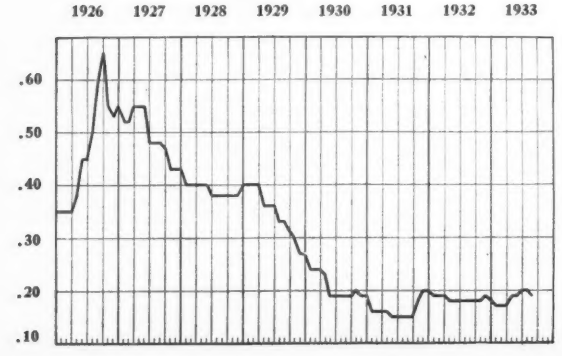
Aloes



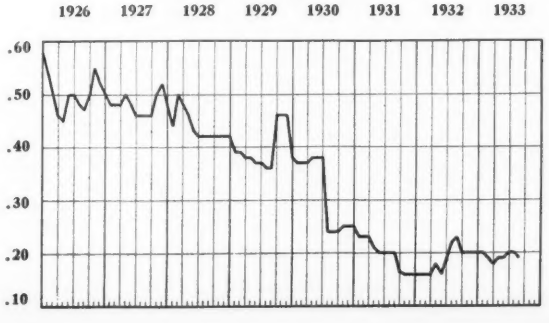
Balsam Tolu



Rhubarb Root



Buchu Leaves, Short



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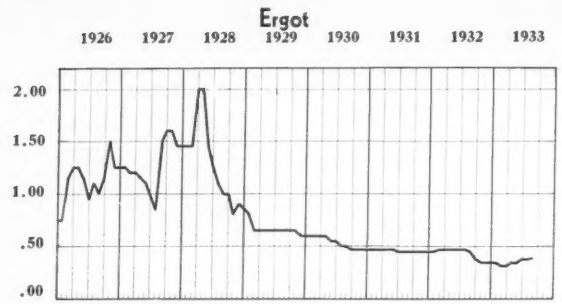

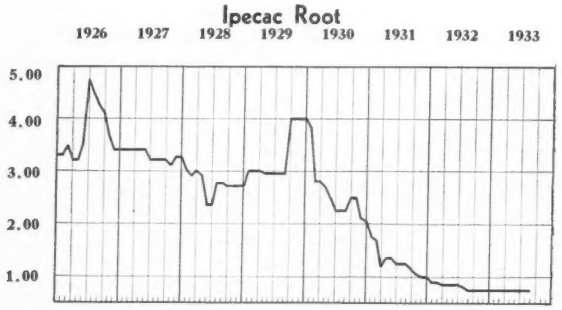

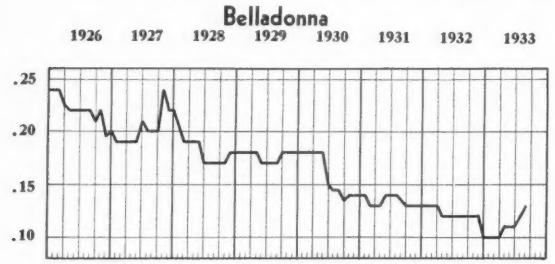

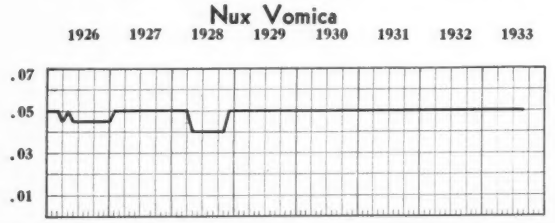

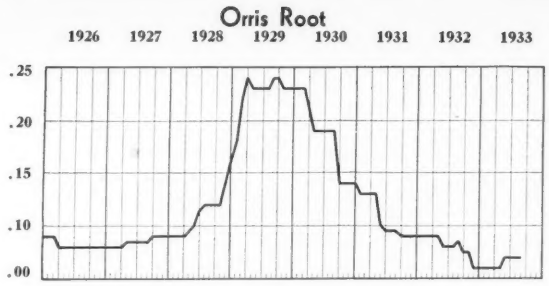

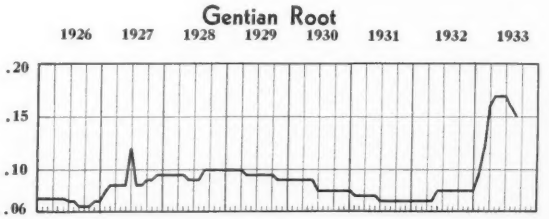

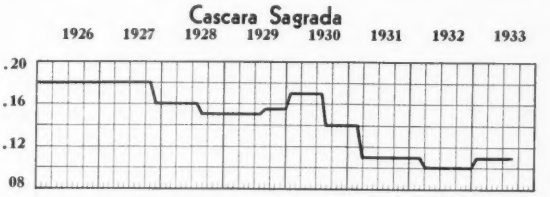

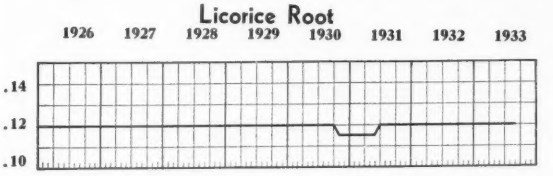

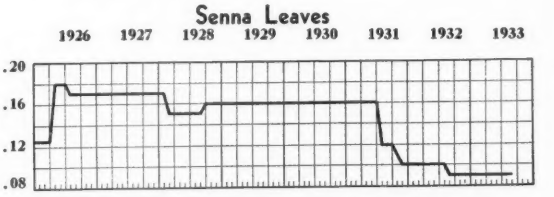

Cascara Off in Germany

The German market for cascara bark has declined during the past three years as a result of the increasing popularity of specially prepared laxatives using other intestinal stimulants. However, there remains a fair market in Germany for this product. The United States is the only source of supply, and it is estimated that between 50 and 70 metric tons are imported annually. (Consul Lester L. Schnare, Hamburg).

Orange Peel Higher

Orange peel was higher on spot. This was in anticipation of a considerable increase in demand with the resumption of production of bitters and cordials when the Eighteenth Amendment is finally repealed. Bitter peel sold up to 8c and 9c per pound and the sweet was offered at from 9c to 10c.

Juniper Berries Advance

Juniper berries is another item in the botanical field that is expected to reach higher levels when consumption for the cordial trade is again resumed with the end of the prohibition amendment. Anticipating this development the spot market has already advanced to the basis of 6½c to 7c per pound. Although the advance is but fractional it is generally conceded to be the forerunner of a prolonged upward trend in this item.

Calendula Flowers Up

Very little interest has been shown in calendula flowers during recent tarding, but replacement costs have been steadily advancing and the spot market has reflected this condition. An advance of 10c per pound was made necessary by the cost to replace, putting this market on the basis of from 50c to 52c per pound.

Echinacea Root Strong

The cost to replace echinacea root was advanced considerably due to the fact collectors have been asking much higher prices for the material. Spot quotations ranged from 21c to 22c per pound.

Lavender Flowers Firmer

Lavender flowers showed a rising tendency on spot. This movement was in keeping with replacement costs. Demand was not expansive but in view of comparatively small stocks minimum quotations for select goods was 35c per pound. Ordinary sold at from 20c to 24c.

Lycopodium Advances

Due to a steady rise in cost to import, lycopodium was advanced on spot now being offered at from 30c to 32c per pound. Movement to buyers was routine but the decreased purchasing power of the dollar necessitated the increase here.

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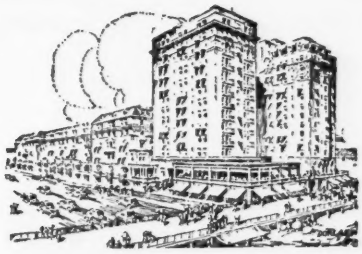

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Psyllium Seed Easier

Spot demand for psyllium seed is highly irregular and confined to small quantities for the most part. A fairly good movement of material to some of the larger packers on orders previously placed is noted, however.

The price structure during the past month can be characterized as tending to the easy side. Single bags of French seed were obtainable at 14c per pound with the blond seed at 6c. Somewhat better could be done in large quantities.

The 1933 season for psyllium or Zaragatona seed in Spain which came to a close as far as the crop was concerned at the end of June is generally reported to have been marked by a noteable reduction in the quantity of the seed collected. Reports indicate that the 1933 growth was good but that the collection was small because the low prices prevailing did not warrant collection the seed. Prices which in past years have been as high as nine or even 10 pesetas a kilogram, were three pesetas in Barcelona, and 2.20 to 2.50 in Seville, and 2.50 to 2.75 in Malaga. These prices are f. o. b. basis, for seed packed in sacks, usually of 50 kilograms. The absence of foreign demand for the past two years has caused the price to decline. No figures are available as to the production of psyllium seed, and estimates vary between 20 tons and 200 tons as the annual production. It seems doubtful if the collection this year will exceed 50 tons, of which probably 30 tons will be required for local consumption. In case of a brisk demand, collections of carry-over held by various small dealers might double the quantity available for export. For the past few years the United States has been the principal purchasers of psyllium seed, but England, France and Germany in some years were substantial buyers. (Consul General Claude I. Dawson, Barcelona).

Imports of psyllium seed into the United States for the first six months of 1932 averaged 2,752,000 pounds, against 3,283,000 pounds for the first six months of 1933, a quantity increase of 19 per cent.

Agar Competitive

Holders of agar agar seemed a little more anxious to move this item during the past month with the result that offerings appeared more freely and the market eased off to lower levels. Number one material was generally quoted at from 49c to 52c per pound and number two sold at from 44c to 48c.

United States imports of agar-agar, for the first six months of 1933 were considerably in excess of imports during a like period last year, but the import value registered a sharp decline.

Details of the Import Trade in Agar Agar

Six months ending June					
1931		*1932*		*1933*	
Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
368,000	$225,000	277,000	$125,000	445,000	$102,000

Angelica Root Up Sharply

Angelica root advanced sharply due to scarcity of the item and the anticipation of increased consumption later on by the distilling trades. Prices ranged all the way from 24c per pound to 40c as to seller quality and amount required. Some material has been offered for shipment but there is said to be little available on spot.

Dandelion Root Firmer

Dandelion root was marked up 1c per pound to the basis of 14c to 15c. Firm undertones prevailed at the higher level. Conditions abroad forecast comparatively higher prices for the new crop of German material. Exchange also favored this development, lending strength to the spot position.

Chamomile Flowers Firmer

All the weak stocks of chamomile flowers seem to have been removed from the spot market. Prices firmed up during late trading with most quarters offering at 16c per pound minimum. This quotation was said to be more in line with prevailing cost of replacement goods. Roman flowers were also firm but unchanged in price.

Senega Root Up

Senega root was again advanced 1c per pound to the basis of from 43c to 46c. Although demand on spot was quiet a firm position continues to be maintained at the source of supply.

Belladonna More Active

The spot belladonna market is definitely shaping up with that in the primary market. Demand has been more active and the increase of 1c per pound here was well maintained. Quotations ranged from 13c to 16c.

Cloves Competitive

Local competition developed in cloves in keeping with the somewhat more advantageous replacement market. Spot quotations were effected to the extent that offerings were made on the basis of 11¼c to 11¾c per pound, representing a decline of approximately 2¼c per pound. Demand was irregular and not very steady during late trading.

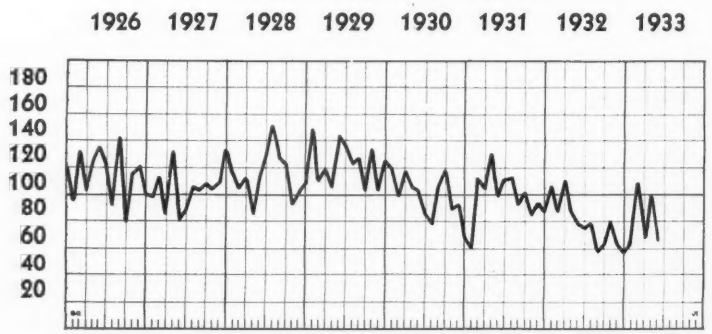
Saffron Higher

Spanish saffron advanced to the basis of from $12.00 to $12.50 per pound. Import costs were exceptionally firm on the basis of recent advances and interest in goods for later arrival has noticeably increased. Stocks here were conservative.

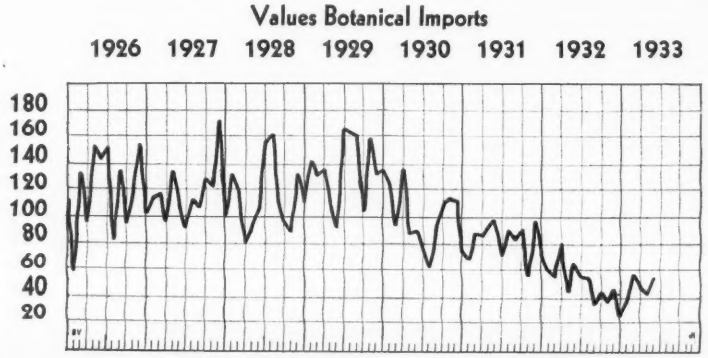
Burdock Root Advances

The spot market for burdock root was higher at 11c to 12c per pound as to quantity. The foreign market took on a much stronger tone during the past month and information was to the effect that a further advance was probable. Local interest was mostly confined to the developments in the replacement market.

Quantities Botanical Imports
1925 Monthly Average Equals 100
Adjusted for Seasonal Variation



Values Botanical Imports



Preservatives for Cosmetics

In our issue of June, 1933, pages 510, 511, 591, we published an interesting article by Dr. Erich Boehm, Berlin, under the above title. Unfortunately, the June issue went to press before we had received Dr. Boehm's comments about our translation of his work. Since publication of the article, Dr. Boehm has called our attention to a few statements which were not entirely correct as published by us, so we feel obligated to the author to publish the true results of his work.

The preservatives with which Dr. Boehm has done so much to reliably preserve pharmaceuticals and cosmetics are the esters of para-hydroxy-benzoic acid and the sodium derivatives of these esters. The methyl and propyl esters have found the widest use. The information which follows not only covers the corrections suggested by Dr. Boehm based on his latest tests, but also gives a clear and rather complete table which should find a place in the files of every chemist in this industry.

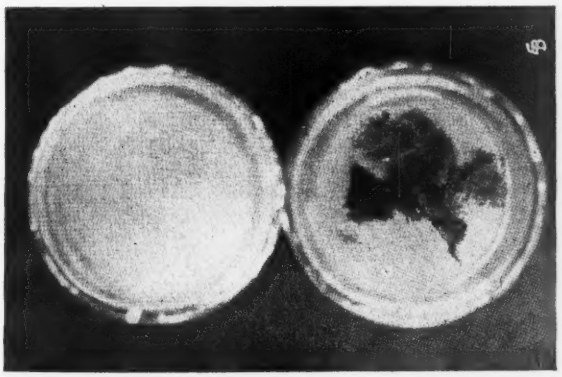
As the original article explained, Th. Sabalitchka and his co-workers have thoroughly investigated and reported upon the relationship between the chemical constitution of carbocylic acids and their derivatives,[1] and their physico-chemical behavior, their growth-inhibiting and killing effects upon micro-organisms. It was these studies which first established the strong anti-microbic effect of the various ester of para-hydroxy-benzoic acid.

TABLE

Material to be preserved	*Concentration for Preservation*			
			Sodium Salts	
	Methyl Ester	*Propyl Ester*	*Methyl Ester*	*Propyl Ester*
1. Drug decoction	0.1 -0.2%	.....	.....	.....
2. Casein emulsion	0.25%	+ 0.1%	or 0.3%	+ 0.15%
3. Fat-free creams	0.05-0.15%	.....	or 0.1-0.2%	.....
4. Creams containing 5-10% fat	0.1%	+ 0.1%	or 0.12%	+ 0.12%
5. Creams containing 10-20% fat	.....	0.15%	.....	or 0.16%
6. Creams containing more than 20% fat	.....	0.2%	.....	or 0.22%
7. Creams with lecithin, cholesterol or horm.	0.25%	+ 0.05%	.....	.....
8. Emulsions	0.1%	+ 0.05%	.....	.....
9. Fat creams	.....	0.25%	.....	.....
10. Glycerin jelly	0.15%	.....	.....	.....
11. Hair fixative (jelly)	0.1 -0.2%	.....	.....	.....
12. Skin function oil (muscle oil, massage oil)	.....	0.15%	.....	.....
13. Lipstick	.....	0.2%	.....	.....
14. Solutions (aqueous, glycerin, alcoholic, of chemical, dyes, etc.	0.1%	.....	.....	.....
15. Almond milk	0.15%	+ 0.05%	.....	.....
16. Nail liquid	0.2%	.....	.....	.....
17. Powder mixture (boric acid, talcum)	1.0%	.....	.....	.....
18. Mucilage from agar, carragheen, gelatin, gum, pectin, tragacanth, etc.	0.1%-0.2%		.....	.....
19. Soaps	0.3%	or 0.2%	.....	.....
20. Hydrogen peroxide	0.10-15%	.....	.....	.....
21. Tooth pastes	0.1-0.2%	.....	or 0.15-0.25%	.....

References

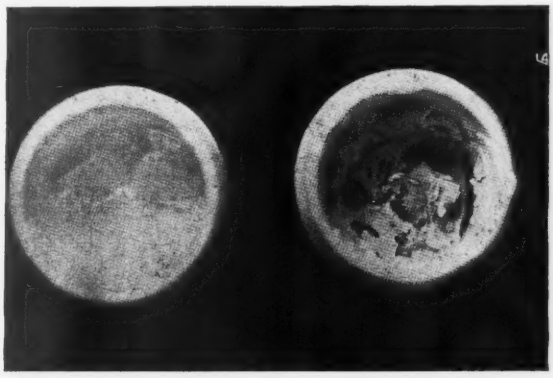
[1]Pharmazeut, Monatsh. 1924, **5**, 235; Desinfektion, 1926 **11**, 80; Pharmazeut. Ztg. 1926, **71**, 834; Schweizer Apothek. Ztg., 1927, **65**, 169; Arbeit. a. d. Pharmaz. Institut d. Univ. Berlin, 1927, **13**, 79; Apothek. Ztg. 1928, **43**, 670; Pharmac. Acta Helvetiae, 1928, **3**, 103.



Hair fixative (tragacanth-gelatin jelly)—left for three months in glasses under unfavorable conditions.

Left: with 0.15% methyl p-hydroxy-benzoate. Remained unchanged.

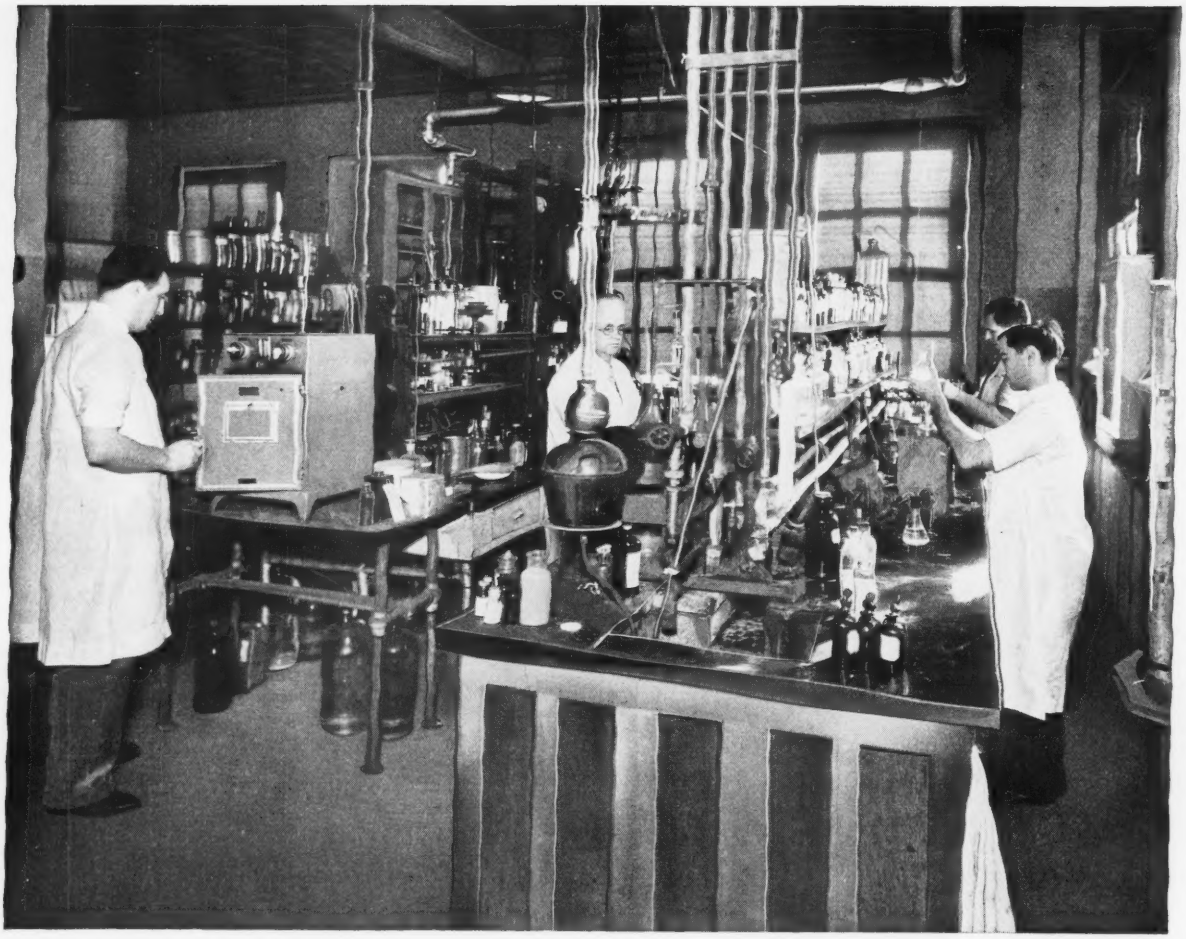
Right: the same without the addition. Largely liquid, growth of Penicillium and Rhizopus types on the surface, putrid odor, discoloration of the mucilage.



Skin cream with 10% fat—left in porcelain jars for 1½ years under unfavorable conditions.

Left: with 0.15% propyl p-hydroxy-benzoate. The sample remained faultless and exhibited no rancidity.

Right: the same without the addition. Heavy growth of various mold forms and spots. Also strongly rancid.



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Opium Gum
(Gran. and Powd.)
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Chemical prices quoted are of American manufacturers, spot New York, f. o. b. for immediate shipment, unless otherwise specified.

Products sold f. o. b. works are so specified. Imported chemicals are so designated. Resale stocks, when a market factor, are indicated "second hand."

Crude Drugs and Essential Oils are quoted f. o. b. New York (Manhattan with limitations) for immediate shipment.

The range of price given is not "bid and asked," but are prices of different sellers, based on varying grades and/or quantities. Containers named are original packages most commonly sold.

Acetanilid
Iodide

Chemicals

Acetanilid, USP, 200 lb bbls..lb	.26	.27
Acetone, pure 350 lb drs wks..	.10	.11
Acetphenetidin, 225 lb bbls..lb.	1.20	1.25
ACID, Acetylsalicylic, 225 lb bbls.	.70	.75
Agaric, 1 oz vials....oz	...	3.50
Arsenous, USP, 220 lb bbls lb.	...	.18
Benzoic, USP, 100 lb bbls.lb.	.48	.52
Boric, 300 lb bbls.....lb.	.07	.08
Cacodylic, 5 lb. bot.....lb.	...	8.00
Camphoric, USP, VIII 1 lb bot.....lb.	5.25	5.40
Carbolic, USP, crys 112 lb tins.....lb.	.17	.18
Cinnamic, 5 lb cans.....lb.	2.85	3.25
Citric, USP, crys 230 lb bbl lb	...	.29
USP, crys imp. 112 lb keg lb.	.34	.36
USP, powd 200 lb bbl...lb.	...	.31½
Gallic, USP, 150 lb bbls..lb.	...	.74
Glycerophosphoric, 25% 1 lb bot.....lb.	1.40	1.75
Hydriodic, USP, 10% 5 lb bot.....lb.	...	.59
Hydrobromic, USP, 40% 155 lb. cbys.....lb.	...	.55
Hypophosphorous, USP, 30% 5 gal demis.....lb.	...	.75
Lactic, USP, VIII 100 lb cbys lb.	.53	.55
USP, X 100 lb cbys....	.55	.57
Phosphoric, USP, Syr 70 lb drs.....lb.	.14	.15
Pyrogallic, crys 5 lb cans..lb.	1.30	1.40
Resublimed, 5 lb cans...lb.	1.60	1.70
Salicylic, USP, 100 lb bbls.lb.	.40	.45
Stearic, double pressed, bags lb.	.08½	.09
Triple pressed, bags,....lb.	.11¼	.12½
Succinic, 100 lb bbls.....lb.	...	1.35
Sulfurous, USP, 6% 100 lb cbys.....lb.	.05	.06
Tannic, USP, fluffy 50 lb bbls. lb.	.83	.86
Powd 200 lb bbls.....lb.	.70	.75
Tartaric, USP, 300 lb bbls.lb	.24	.24½
Aconitine, Alk, crys 1 oz vials oz.	...	29.00
Amorphous, 1 oz vials....oz.	...	17.00
Agaricin, 1 oz vis incl.....oz.	...	2.32
ALCOHOL, Benzyl, 5 lb bot lb.	1.20	1.35
F. O. B. Works.....		
Ethyl, USP, 190 pf 54 gal drs.....gal.	...	2.535
Grain U. S. P. bbls....gal.	...	2.565
Pure tax free drums...gal. Ethyl.....	...	.445
Grain.....	...	.475
Denatured, (drums included) add 5c for bbls.		
No. 1 spec.....gal.	.335	.415
No. 5 comp.....gal.	.34	.42
23 a, spec.....gal.	.37	.49
39 b, spec.....gal.	.38	.50
40 m, spec .....gal.	.34	.46
Isopropyl refd 98-99% drs. incl.....gal.	.55	.60
Phenylethyl, 1 lb bot.....lb.	4.30	4.50
Aloin, USP, 100 lb cases...lb.	.77	.82
Aluminum Acetotartrate kegs lb.	...	1.60
Amidipyrine, 10 lb boxes....lb.	4.00	4.10
AMMONIUM, Acetate 100 lb kegs.....lb.	.26	.33
Benzoate, USP, 1 lb bot...lb.	...	1.27
Borate, 10 lb bot.....lb.	...	.35
Bromide, USP, 450 lb bbls.lb.	.39	.40
Carb, USP, lump 150 lb kegs lb.	...	.11
USP, powd 150 lb kegs..lb.	...	.12
Citrate, 100 lb kegs.....lb.	.90	1.30
Ichthyolate, as to brand..lb.	4.00	4.50
Iodide, USP, 25 lb jars...lb.	...	4.25
Phosphate, dibasic 250 lb bbls lb.	.48	.50
Salicylate, USP, 100 lb kegs lb.	1.15	1.20
Valerate, USP, 25 lb jars..lb.	2.75	2.90
Amylene Hydrate, 1 lb bot..lb.	...	7.10
Antipyrine, USP, 100 lb cans.lb.	2.00	2.50
Apomorphine Hydrochloride, ¼ oz. vials.....oz.	24.60	22.70
Arecoline Hydrobrom, 1 oz vials oz.	4.75	5.00
Aspidospermine Amorphous.oz.	...	15.00
Atropine Alk, USP, 1 oz. vials oz.	5.25	5.50
Methyl bromide, 1 oz vials.oz.	...	25.00
Sulfate, 5 oz cans.....oz.	...	2.50
Single ounce.....oz.	...	3.00
Barbital, 1 lb. bot.....lb.	3.50	3.60
Barium Iodide, 5 lb box.....lb.	...	4.35
Sulfate, X-ray diagn bbls..lb.	.09½	.10
BAY RUM Porto Rico, 45 gal. bbls.....gal.	.75	.80
Domestic syn. 50 gal bbl..gal.	.70	.75
St. Thomas, 50 gal bbls...gal.	.80	.90
Benzocaine 25 lb. lots..... 1 lb.l ots.....lb.	5.00	5.75
Benzonaphthol, 5 lb boxes..lb.	2.50	2.60
Benzoyl Cholride, 500 lb dr..lb.	1.00	1.05
Benzyl Benzoate, Medicinal FFC.....lb.	1.20	1.40
Chloride Redis, 160 lb cby.lb.	.30	.35
Formate, 1 lb bot.....lb.	3.25	3.50
Succinate, 160 lb cby.....lb.	...	5.25
BISMUTH, *metal* 100 lb cases lb.	...	1.25
Ammon. Citrate, USP, 5 lb cans.....lb.	...	3.40
Betanaphtholate, 5 lb box.lb.	...	3.14
Citrate, USP, 5 lb cans....lb.	...	2.77
Chloride.....lb.	...	2.85
Hydroxide .....lb.	...	3.27
Nitrate, 25 lb jars.....lb.	...	1.20
Oxide anhydrous.....lb.	...	3.45
Oxychloride, 25 lb boxes...lb.	...	2.95
Salicylate, 25 lb boxes.....lb.	...	1.85
Subcarbonate, USP, 25 lb boxes.....lb.	1.65	1.78
Subcarbonate, X-ray diag 1 lb. bot.....lb.	2.79	1.86
Subgallate, USP, 25 lb boxes .....lb.	1.65	1.78
Subiodide, 5 lb lots.....lb.	...	4.20
Subnitrate, USP, 25 lb jar.lb.	1.40	1.53
Subsalicylate, USP, 25 lb boxes.....lb.	2.45	2.50
Tannate.....lb.	...	2.32
Borax, crys USP, 400 lb bbls.lb.	...	.04½
Bromoform, USP, 5 lb bot cases .....lb.	1.65	1.90
Butylchloral Hydrate bot....lb.	4.00	5.00
Cadmium iodide, 10 lb bot...lb.	...	3.65
CAFFEINE Alk, USP, 1 100 lb kegs.....lb.	2.20	2.30
Citrated, 50 lb cans.....lb.	1.80	1.85
Hydrobromide, 1 lb bot...lb.	4.80	5.00
Hydrochloride, 1 lb bot...lb.	6.05	6.55
Sulfate, 1 lb bot.....lb.	5.40	5.90
Sodium Benzoate, tins....lb.	...	3.05
Salicylate, tins.....lb.	...	2.95
Calcium Bromide, 100 lb cs..lb.	...	.60
Carb, USP, 175 lb bbls....lb.	.05	.06
Gluconate, Gran. 125 lb..... bbls.....lb.	.47	.52
Powd.....lb.	.47	.52
Glycerophos, 250 lb bbls...lb.	...	1.05
Hypophos, USP, 25 lb cans lb.	.55	.60
Iodide, 5 lb bot.....lb.	...	3.75
Lactate, USP, 500 lb bbls lb.	.35	.40
Lactophosphate Soluble...lb.	...	1.20
Powdered tins.....lb	...	1.00
Insol, powd tins.....lb.	...	.50
Phosphate & Sulfate Tooth Paste grade, Works..lbs.	.03	.06
Sulfide, USP, 100 lb drs...lb.	.21½	.24
CAMPHOR, jap. ref. slabs 100 lb. cases.....lb.	.47	.48
Refined powd.....lb.	.48	.49
½ oz tab, 100 lb cases....lb.	.53	.54
Liniment, bbls.....gal.	2.10	2.20
Monobrom, 100 lb cases...lb.	1.60	1.65
Casein edible, 100 lb kegs...lb.	.45	.55
Charcoal Animal medicinal jars incl.....lb.	...	.50
Charcoal Wood, powd, 100 lb. bbls.....lb.	.06	.07
Chloral Hydrate, USP, 25 lb jars.....lb.	.75	.77
100 lb drums.....lb.	.70	.75
Cholesterin.....lb.	11.00	17.00
Chloroform, USP, 50 lb drs...lb.	.32	.35
Chlorophyll, 1 lb. bot.....lb.	3.75	4.00
Chromium Sulfate Scales, tins lb.	.45	.50
Powdered tins.....lb.	.50	.55
Chrysarobin, 50 lb tins.....lb.	2.50	2.55
Cinchonine Alk, 100 oz tins..oz. Crystal.....oz.	.46	.54
Sulfate, 100 oz tins.....oz.	.30	.32
Cinchonidine Sulfate, 100 oz tins .....oz.	.42	.44
Cinchophen, U.S.P. kegs...lb.	2.75	3.25
Cocaine Alk, USP, 1 oz vial..oz.	...	12.57
Hydrochloride, USP.....oz.	9.75	10.00
CODEINE Alk, 1 oz vials, 10 lots.....oz.	...	11.87
Hydrobromide.....oz.	...	8.92
Hydrochloride.....oz.	...	10.67
Nitrate, oz vl 10 oz lots....oz.	...	9.80
Phosp. oz vl, 10 oz lots....oz.	...	9.17
Salicylate.....oz.	...	8.25
Sulfate, oz vl, 10 oz lots...oz.	...	10.57
Colchicine Alk, USP, 1 oz vl.oz.	...	22.00
Salicylate, 1 oz vls.....oz.	...	35.50
Cream Tartar, USP, 300 lb bbls lb.	.17½	.17¾
Imp. powd. 224 lb bbls....lb.	.17¾	.17¾
Creosote, USP, 42 lb cbys....lb.	.45	.47
Carbonate, 150 lb.....lb.	1.40	1.75
Cresol, USP, 400 lb drums...lb.	...	.18
500 lb drums.....lb.	.12	.15
DIGITALIN Pure, 1 oz vial. oz	15.00	15.50
Dover's Powder, USP, 5 lb tin lb.	2.75	2.80
Duboisine Sulfate, 1 oz vl....oz.	35.00	40.00
Emetine Alk, 15 gr vial.....oz.	...	.85
Hydrochloride, USP, 1 oz vl oz.	13.00	13.25
15 grain vials.....oz.	2.50	2.70
Ephedrine, alk. 25 oz. tins,..oz.	1.50	1.90
Hydrochloride, 25 oz. tins, oz.	1.30	1.65
Sulfate, 25 oz. tins.....oz.	1.30	1.65
Epsom Salts, USP, 200 lb bbls 100 lb.	2.25	2.50
Imp. 100 lb bbls.....100 lb.	2.30	2.35
Ergotin Bonjean, 1 lb jars...lb.	18.50	19.00
Eserine Alk, 1 oz vials.....oz	...	50.00
Salicylate, 1 oz vials.....oz.	...	40.00
Sulfate, USP, VIII 1 oz vials oz.	...	40.00
ETHER, USP, 55 lb drums..lb.	...	.12
Anaesthesia, 55 lb drums..lb.	...	.24
Nitrous, 1 lb bot.....lb.	.75	.77
Ethyl Chloride, 200 lb bot...lb.	.22	.24
Ethyl Iodide, 5 lb bot.....lb.	6.00	6.05
Formaldehyde, USP, 100 lb cbys 1c-1 wks.....lb.	.07	.07½
Gall Extract.....lb.	.20	.21
GLANDULAR SUBSTANCES 1 lb. lots		
Duodenal Substance.....	...	3.75
Liver Extract 1-20	...	5.75
Orchic Substance (Testicular)	...	3.75
Ovarian Substance, whole ..	...	12.50
Ovarian Residue	...	10.00
Pituitary Substance, whole..	...	45.00
Pituitary Substance, Anterior Lobe	...	40.00
Thyroid, U. S. P.....	...	3.75
Oxgall Powder.....	...	1.25
GLYCERIN, CP, 550 lb drums lb.	...	.10½
Gold Chloride, bottles.....oz.	12.00	12.50
Guaiacol, liq. USP. 100 lb cbys.....lb	1.60	1.70
Crystals.....lb	2.25	2.50
Benzoate, 1 lb bottles.....lb.	...	3.00
Carbonate, 5 lb boxes.....lb.	1.75	1.80
Halazone, 5 lb bot.....lb.	2.75	3.25
Hexamethylenetetramine, USP, 100 lb dr.....lb.	.46	.47
Homatropine Hydrobrom USP. oz.	...	14.50
5 oz and 1 oz vials.....oz.	...	13.50
Hydrastine Alk, USP, 1 oz vial oz.	20.50	21.00
Hydrochlide, USP, 1 oz vials oz.	20.50	21.00
Sulfate, 1 oz vial.....oz.	22.50	23.00
Hydrastinine Hydrochloride, USP, 15 gr vials.....oz.	...	40.00
Hydrogen Peroxide, USP, soln 375 lb bbls.....lb.	.03½	.04½
Hyoscine Hydrobrom, USP, 1 oz vials.....oz.	13.07	35.00
5 oz, 1 oz vials.....oz.	...	13.57
Hyoscyamine Alk, crystals, 1 oz vials.....oz.	...	25.07
Amorphous, 1 oz vial...oz.	...	75.07
Hydrobromide, USP. 1 oz vial oz.	...	25.00
Sulfate, 1 oz vial.....oz.	...	25.07
Hypoquinone, 100 lb kegs...lb.	...	1.10
ICHTHYOL, tins.....lb.	4.00	4.25
Iodide Arsenous, 5 lb bot...lb.	...	5.20

Chemicals

Arsenous-Mercuric soln, 5 lb bot	lb	.26
Iodine, crude, 200 lb kegs	lb	15 sld per kilo
Resublimed, 25 lb jars	lb	2.10
Tincture bbls	gal	3.00
Iodoform, powd 10 lb bot	lb	5.30
Iron & Ammonium Citrate, USP, 50 lb cans	lb	.57 .58
Chloride, USP, lump 400 lb bbls	lb	.06 .08
Citrate, USP, VIII 25 lb can	lb	.94 .99
Hypophosphite, 5 lb cans	lb	1.40 1.50
Iodide, 1 lb bottles	lb	3.00
Phosphate, USP, 50 lb cans	lb	.69
& Potas Oxalate, 250 lb bbl	lb	.45
Pyrophosphate, USP, 50 lb	lb	.74 .80
& Sod Oxalate, 50 lb. cans	lb	.30½
Sulfate, USP, crys bbls	lb	.04 .04½
Ferrous dried bbls	lb	.08
Valerate, tins	lb	2.75 3.00
Jalap Resin, USP lumps, 5 lb tins	lb	4.00
Powdered, tins	lb	4.65
Lanolin, hyd 350 lb. bbls	lb	.13 .15
Anhydrous, 350 lb. bbls	lb	.14 .16
Lead Acetate, USP, 100 lb kegs	lb	.15½ .19½
Iodide, USP, VIII 5 lb bot	lb	2.55
Lecithin, 5 oz. jars	oz	1.00 1.30
Vegetable, cans	lb	1.00 2.50
Licorice Ext Mass, cases	lb	.19 .20
Compound powder, bbls	lb	.11 .13
LITHIUM CARBONATE, 250 lb bbls	lb	**1.25 1.35**
Citrate, USP, 100 lb kegs	lb	**1.40**
Iodide, 5 lb bottles	lb	4.60
Lobeline Sulfate, ¼ oz vial	oz	8.75
Magnesium Carbonate, USP, 100 lb bbls	lb	.08 .09
English, oz blocks	oz	.16 .18
Glycerophosphate, 5 lb tins	lb	3.20 3.25
Hypophosphite, 5 lb cans	lb	1.10 1.15
Oxide, 100 lb. cases	lb	.35 .45
Salicylate, 100 lb kegs	lb	1.10
Stearate, bbls	lb	.18 .20
Manganese Glycerophosphate, 5 lb tins	lb	2.90 3.00
Hypophosphite, USP, VIII 5 lb cans	lb	1.35 1.40
Iodide, 1 lb bottles	lb	5.35
MENTHOL, USP, 60 lb cases	lb	2.90 3.10
Synthetic, cases	lb	2.50 2.90
Mercury Metal, 75 lb flasks	fl	64.00 65.00
Bichloride, crys 25 lb box	lb	.92
Gran powd, 100 lb kegs	lb	.77
Bisulfate, 25 lb boxes	lb	1.48
Blue Mass, 25 lb boxes	lb	.84
Powd, 25 lb boxes	lb	.85
Blue Ointment, USP, 50%, 25 lb cans	lb	.99
Mild 30%, 25 lb cans	lb	.69
33 1/3% mercury	lb	.72
Calomel, 50 lb boxes	lb	1.23
English	lb	2.65 2.75
Iodide, green, 25 lb jars	lb	3.95
Red, USP, 25 lb jars	lb	4.00
Yellow, USP, VIII, 25 lb jars	lb	4.10
Red precip Powd. USP, 25 lb. boxes	lb	1.34
White precip, Powd., USP, 25 lb. boxes	lb	1.41
Salicylate, 25 lb bot	lb	2.32
With chalk, USP, 25 lb boxes	lb	.69
Methanol, Pure 1c-1 drs	gal	.41½
Methyl Salicylate, USP, 50 lb cans	lb	.40 .42
Methylene Blue, USP, med 5 lb cans	lb	2.00 2.05
Milk powd, 150 lb bbls	lb	.09 .12
MORPHINE Alk, 5 oz tin	oz	11.15 11.20
Acetate, 5 oz tins	oz	8.80 8.85
Hydrobromide, 5 oz tins, 10 oz lots	oz	8.75 8.80
Hydrochloride, 5 oz tins, 10 oz lots	oz	8.85 9.10
Ethyl Hydrochloride, 5 oz tins 10 oz lots	oz	10.60 10.82
Sulfate, 5 oz tins, 10 oz lots	oz	8.75 8.80
Naphthalene Flake, 175 lb bbls wks	lb	.04½ .05
Balls, 250 lb bbls wks	lb	.05½ .06
Neo-cinchophen 5 lb. lots	lb	15.00 18.00
Oxgall, Purified, 5 lb bot	lb	2.00 2.50
USP Extract, 5 lb. bot	lb	1.80 1.90
Oxyquinoline Sulfate, tins	lb	5.00 5.75
Pancreatin, USP, 100 lb	lb	1.90
Paraffin, refd, 200 lb cs slabs 118 -120 deg MP	lb	.08 .09
128-132 deg MP	lb	.07½ .07½
Para-Aldehyde, USP, 100 lb carboys	lb	.48 .50
Pepsin, USP, 100 lbs. 1:3000	lb	2.25
100 lbs. 1:6000	lb	4.00
100 lbs. 1:10000	lb	6.50
Peptone, powd., or granular 5 lb. 100 lb. lots	lb	.70 1.00
PHENOBARBITAL, U. S. P., 100 lb. lots	lb	5.50
Phenolphthalein, U. S. P. 100 lb drums	lb	.52
5 lb cans 100 lb lots	lb	.60
Yellow		.47
Pilocarpine Hydrochloride, USP, 1 oz vials 25 oz lots	oz	2.00 2.25
Nitrate, 25 oz lots	oz	1.90 2.15
Single ounce	oz	2.15 2.40
Alkaloid, 15 gr vials	vl	.75
Piperadine, 25 oz bottles	lb	8.00
Popodhyllin 5 lb bottles	lb	4.00 4.15
Potassium Acetate, USP, 100 lb kegs	lb	.29 .30
Bicarb, USP, crys 320 lb bbls	lb	.09½ .10
Bromide, USP, crys 100 lb cs	lb	.36 .37
Citrate, USP, 100 lb. box	lb	.42½ .43
Guaiacol Sulfonate	lb	1.95 2.25
Potassium Hypophosphite, 10 lb. cans	lb	.65 .70
Iodide, USP, 25 lb cases	lb	2.00
Lactophosphate, 4 oz bot	lb	.90
Permangan, USP, crys, 100 lb drs wks	lb	.16 .16½
Phosphate dibasic pure, kegs	lb	.49
Salicylate, 25 lb cans	lb	1.18
Sulfate, USP, VIII, 100 lb kegs	lb	.13 .15
Sulfocyanide, CP 15 lb jars	lb	.50
Tartrate, CP, tins	lb	.65
Pyrogallol, USP, see Acid Pyrogallic		
Quinidine Alk, crystals, 100 oz. tins	oz	.72 .78
Sulfate, 100 oz tins	oz	.50
QUININE SULFATE, USP, 100 oz tins	oz	.43½
1 oz tins, 100 oz lots	oz	.53½
Acetate	oz	.92
Arsenate	oz	.92
Benzoate	oz	.92
Bisulfate, USP	oz	.43½
Citrate	oz	.65
Dihydrobromide	oz	.68
Dihydrochloride, USP	oz	.66
Ethyl Carbonate	oz	.52
Ferrocyanide	oz	.92
Formate	oz	.87
Glycerophosphate	oz	1.10
Hydrobromide, USP	oz	.60
Hydrochlorosulfate	oz	.66
Hypophosphite	oz	.84
Lactate	oz	.65
Phenolsulfonate	oz	.62
Phosphate	oz	.76
Salicylate, USP	oz	.66
Tannate, USP	oz	.78
Tartrate	oz	.92
Valerate	oz	.72
Urea Hydrochloride, USP	oz	.66
Rennet, N. F. 5 lb 1:25,000	lb	2.95 3.50
Resorcinol, USP, 25 lb cans	lb	1.57 1.65
Rochelle Salt, USP, 225 lb bbl	lb	.11½ .12
Rock Sugar, 5 lb boxes	lb	.15
Saccharin, USP, 10 lb cans	lb	1.70 1.80
USP, Soluble, 10 lb cans	lb	1.75 1.85
Salicin, USP	lb	7.00 7.25
SALOL, USP, 100 lb drums	lb	.90
Saltpetre, powd, bbls wks	lb	.06½ .08½
Santonin, USP, bulk	lb	60.00 65.00
Saponin, refined	lb	1.30 1.50
Seidlitz Mixture, 250 lb bb	lb	.10 .10½
Silver Metal, American	oz	.29½
Iodide, 16 oz lots	oz	.69
Nitrate, 100 oz bottles	oz	.26½ .27½
Nucleinate, bulk	oz	.37
Proteinate	oz	.39 .41
SODIUM BENZOATE, USP, 100 lb bbls	lb	.42 .47
Bromide, USP, 100 lb kegs	lb	.36 .37
Cacodylate, USP, 25 lb bot	lb	5.00 5.25
Citrate, USP, X100 lb. box	lb	.31½
USP VIII, 100 lb. box	lb	.25
Glycerophosphate, N.F., crys 25 lb cans	lb	1.27 1.33
Powder, 25 lb tins	lb	1.32 1.38
Soln, USP, 25 lb tins	lb	1.05 1.15
Hypophosphite, USP, 25 lb cans	lb	.60 .65
Iodide, USP, 25 lb jars	lb	2.75
Phosphate (Mono-Sodium), 100 lb kegs	lb	.28 .29
Di-Sodium USP, granular, 275 lb bbls	lb	.07½ .08
Pyrophosphate, 100 lb kegs	lb	.29
Salicylate, 100 lb kegs	lb	.47
Sulfocarbolate, USP, 100 lb kegs	lb	.25
Sulfocyanate, CP crys, jars included	lb	.60
Spartein Sulfate, USP, 25 oz bulk	oz	.65 .70
Single oz vial	oz	.77 .90
STRONTIUM BROMIDE USP, 50 lb kegs	lb	.52 .53
Carb, 100 lb kegs wks	lb	.20
Iodide, USP, 25 lb jars	lb	3.00
Lactate, kegs	lb	.90 1.10
Nitrate, 600 lb bbls NY	lb	.08 .08½
Imp. bbls NY	lb	.08 .08½
Salicylate, USP, 100 lb keg	lb	1.10
Strophanthin, USP, 1 oz vial	oz	19.00 19.00
Crystals	lb	75.00 75.00
Strychnine Alk, USP crys, 100 oz tins	oz	.37
Powdered	oz	.27
Acetate	oz	.65
Arsenate, 25 oz cans	oz	.65
Glycerophosphite, USP	oz	.65
Hydrobromide	oz	.65
Hydrochloride	oz	.65
Hypophosphite	oz	.75
Nitrate, USP	oz	.60
Phosphate	oz	.65
Sulfate, USP, powd	oz	.24
Sugar, refined, 275 lb bbl 100 lb	lb	5.80 5.90
Milk, USP, 200 lb bbls	lb	.18 .20
Sulfonethylmethane, USP, 10 lb boxes	lb	3.85 4.05
Sulonmethane, USP, 10 lb box	lb	2.65 3.85
Sulfur flwrs. washed, USP, 125 lb bbl	lb	.06
Iodide, USP, VIII, 5 lb bot	lb	3.85
TARTAR EMETIC, USP, 300 lb bbls	lb	.26 .28
Terebene, tins	lb	.85
Terpin Hydrate, USP, 100 lb kegs	lb	.35 .37
Theobromine Alk, 5 lb cans	lb	1.80 1.85
Sod. Salicylate, 1 lb bot	lb	1.95 2.00
Sod. Benzoate, 1 oz vials	oz	1.00
Thymol, USP, 25 lb tins	lb	1.45 1.60
Iodide kegs	lb	4.30
Titanium Oxide, tons, bags, lb.	lb	.18
100 lb. kegs	lb	.19½
Veratrine Alkaloid	oz	2.25
Sulfate, 1 oz vials	oz	2.25
Witch Hazel Ext., 50 gal bbl	gal	.60 .80
Zinc Carb, USP, 100 lb keg	lb	.28 .31
Chloride, USP, 25 jars ex	lb	.24 .29
Iodide, 5 lb bottles	lb	4.25
Oxide, USP, 100 lb bbls	lb	.13 .14
Stearate, USP, 50 lb bbl	lb	.16 .17
Sulfate, USP, 100 lb bbl	lb	.08 .09
Sulfocarbolate, 100 lb kegs	lb	.23 .26

Miscellaneous

Absorption Bases	lb	.60 .75
Castor Oil, odorless, bbls	lb	**.12**
Chalk drop, 175 lb bbls	lb	.03½
Precip. light, 250 lb. cask	lb	.04½
Heavy 540 lb. casks	lb	.04½
English light, bags	lb	.04½
English light, casks	lb	.05½
Cocoa Butter, fingers 12 lb. box	lb	.22 .24
Cod Liver Oil Nor. 30 gal. bbls	bbl	26.00 28.00
Newfoundland	bbl	21.00 22.00
Collodion U. S. P. 30 lb. dr	lb	.13 .14
Colors certified; 1 lb. cans, 5 lb. cans		
Amaranth No. 107	lb	2.55 2.65
Brilliant Blue F.C.F.	lb	13.00 13.50
Erythrosine No. 517	lb	17.00 17.50
Orange Ind. 85	lb	2.55 2.65
Ponceau 3R No. 56	lb	5.25 5.50
Tartrazine No. 94	lb	2.55 2.65
Corn Syrup 42° 50 gal. bbl. 100 lb		2.28
Gelatin, USP, Silver 100 lb. cases	lb	.49 .55
Pure Food, 50 lb. bbl	lb	.47 .49
Glucose, (grape sugar) dry 70° bags c-l NY 100 lb		3.14 3.24
Haarlem Oil, bot 6 gross cases	gross	3.25
Imported, 5 gr. cs	gross	3.35
Kaolin, Bags	lb	.05 .08
Colloidal Grade 200 lb. tin lined wooden drums	lb	.10½ .12
Mineral Oil White, 50 gal. bbls. 80-90 vis	gal	.53 .58
125-130 vis	gal	.74½ .84½
320-330 vis	gal	.84½ .94½
Russian 80-85 vis	gal	.70 .75
110-115 vis	gal	.79 .84
145-155 vis	gal	.83 .88
180-185 vis	gal	.86 .91
335-345 vis	gal	.93 .98
Olive Oil, Edible bbls	gal	1.45 1.65
Paraffin Wax, fully refined, slabs 125 @ 127 A.M.P. bags	lb	.053
130 @ 132 A.M.P. bags	lb	.0595
135 @ 137 A.M.P. bags	lb	.0655
Petrolatum, Lily White, USP, 400 lb. bbl	lb	.07½ .08½
Snow White USP, 400 lb. bbls	lb	.08½ .09½
Rice Starch, 140 lb bags	lb	.09 .10
Soap Castile, bars 40 lb. Case	Cs	12.75
Powd. USP 250 lb. bbls	lb	.21 .23
Green, USP, 450 lb. bbls	lb	.07½ .07½
Neutral, powd. 200 lb. bbls	lb	.18½ .20½
Talc, Italian, 220 lb bags	ton	55.00 75.00
French, 220 lb bags	ton	45.00 50.00
Turtle Oil, gal		3.50 5.00

Waxes, See Drugs & Spices

Aromatics and Essential Oils

Acetophenene, CP, 1 lb bot..lb.	3.50	3.65
Aldehyde, C 8 (Otcyl) 1 lb bot ..lb.	30.00	35.00
C 7, 1 lb bot..lb.	4.50	5.50
C 9 (Nonyl), 1 lb bot ....lb.	40.00	45.00
C 10 (Decyl), 1 lb bot....ab.	30.00	35.00
C 14, 1 lb bot..lb.	8.50	14.00
C 16, 1 lb bot..lb.	9.25	18.00
AMYL ACETATE, pure, 25 lb cans..lb.	.43	.50
Butyrate, 1 lb bot..lb.	.95	1.50
Butyrate, 5 lb bot..lb.	...	1.00
Cinnamate, 5 lb bot..lb.	9.50	9.75
Formate, 1 lb bot..lb.	...	**1.75**
Formate, 5 lb bot..lb.	...	**1.60**
Phenyl Acetate, 1 lb bot...lb.	**4.50**	5.00
Salicylate, 100 lb cbys....lb.	.65	1.25
Anethol, 2 lb bot..lb.	1.00	1.10
Anisic Aldehyde, 1 lb bot....lb.	3.10	3.60
Benzaldehyde, USP, 40 lb cbys ..lb.	1.30	1.40
FFC, 40 lb cbys..lb.	1.35	1.45
Benzoic Ether, see Ethyl Benzoate		
Benzophenone, 1 lb bot..lb.	1.75	2.25
Benzyl Acetate, 100 lb cbys..lb.	.60	.80
Alcohol, 5 lb bot..lb.	.85	.95
BENZYL BENZOATE.....	1.10	1.15
Medicinal, FFC..lb.	...	1.40
Buytrate, CP, 1 lb bot...lb.	9.25	9.50
Benzyl Cinnamate, 1¼ bot. lb.	7.00	7.25
Formate, 1 lb bot..lb.	**3.15**	**3.25**
Propionate, 1 lb bot..lb.	**2.25**	**2.40**
Succinate, 1 lb bot..lb.	5.25	5.50
Valerate, 5 lb bot..lb.	3.00	3.25
Borneol, 1 lb bot..lb.	1.35	1.85
Bornyl Acetate, 1 lb bot....lb.	1.50	2.60
Bromstyrol, 25 lb cases....lb.	3.75	3.85
Butyl Anthranilate dom, 1 lb bot..lb.		
Carvol, 5 lb bot..lb.	3.10	3.50
Cinnamic Acid, 5 lb cans....lb.	3.25	3.50
Alcohol liquid, 1 lb bot...lb.	2.50	2.60
Crystallizable..lb.	3.50	4.00
Aldehyde..lb.	2.25	2.50
Imported, 1 lb bot....lb.	7.75	9.00
Citral, 25 lb cans..lb.	2.00	3.20
Citronellol 1 lb bot..lb.	2.10	2.35
Citronelyl Acetate, 1 lb bot..lb.	3.50	3.75
Coumarin, 25 lb cans..lb.	3.25	3.50
DECYL ALCOHOL.....lb.	22.00	25.00
Diphenyloxide, 25 lb tins....lb.	1.05	1.25
Diphenyl Methane..lb.	1.75	2.00
Duodecyl Alcohol..lb.	24.00	26.00
Ethyl Acetate, pure, 5 lb bot..lb.	.05½	.06½
Benzoate, 5 lb bot..lb.	**1.25**	**1.50**
Ethyl Butyrate, 5 lb bot....lb.	1.80	2.00
Caproate, 1 lb bot..lb.	3.25	3.50
Cinnamate, 1 lb bot..lb.	4.00	4.50
Formate, 5 lb bot..lb.	1.00	1.25
Methyl Paracresol, 1 lb bot ..lb.	3.25	3.50
Phenyl Acetate, 5 lb bot..lb.	3.75	4.00
Valerate, 5 lb bot..lb.	...	3.75
Salicylate, 5 lb bot..lb.	1.95	2.00
Eucalyptol, USP, 50 lb cans..lb.	.57	.60
Eugenol, USP, 25 lb cans....lb.	2.00	2.50
Geraniol, 50 lb cases..lb.	1.75	2.35
Geranyl Acetate, 1 lb bot....lb.	2.75	2.80
Butyrate, 1 lb bot..lb.	13.00	13.50
Formate, 1 lb bot..lb.	12.00	12.50
Heliotropin, 100-10 lbs..lb.	1.75	2.00
Imported..lb.	2.10	2.30
Hydroxycitronellal, 1 lb..lb.	2.75	3.85
Indol, CP, 1 oz bot..oz.	2.90	3.00
IONONE, 1 lb bot 100%...lb.	4.00	4.50
Alpha..lb.	5.75	6.00
Beta..lb.	4.50	5.00
Methyl..lb.	5.00	5.25
Iso Borneol..lb.	2.25	2.35
Iso Bornyl Acetate..lb.	3.00	3.20
Iso-Butyl Benzoate, 5 lb bot..lb.	2.75	3.00
Iso-Eugenol, 1 lb bot....lb.	3.00	3.05
Iso-Safrol, 1 lb bot imp....lb.	1.75	1.85
Domestic, 5 lb bot....lb.	3.50	3.75
Linalol from Bois de Rose, 5 lb bot..lb.	1.65	3.50
Linalyl Acetate, 1 lb bot....lb.	2.25	2.35
Benzoate, 1 lb bot....lb.	13.00	14.00
Formate, 5 lb bot..lb.	10.50	12.00
METHYL ACETOPHENONE ..lb.	**2.00**	**2.15**
Anthranilate, 1 lb bot....lb.	2.15	2.25
Imported..lb.	2.70	2.75
Benzoate, 5 lb bot imp....lb.	**1.25**	**1.35**
Domestic, 5 lb bot....lb.	**1.25**	**1.35**
Cinnamate, 1 lb bot....lb.	3.35	4.00
Heptenone, 1 lb bot....lb	3.50	4.00
Paracresol, 1 lb bot....lb	4.50	8.00
Phenylacetate, 5 lb bot...lb	2.50	2.75
Salicylate, USP, 500 lb dr .lb.	...	.40
50 lb cases..lb.	...	.42
Mirbane rect, 1,000 lb drs...lb.	.12	.13
Musk Ambrette 1 lb cans...lb	6.00	**6.25**
Musk Ketone 1 lb cans.....lb.	**7.55**	**7.80**
Xylene 5 lb cans..lb.	2.25	2.85
Nerolin 1 lb cans..lb.	1.35	1.40
Octyl Alcohol 1 lb bot.....lb.	18.00	20.00
Oenanthic Ether lb bot.....lb.	1.90	2.00
Oleoresin Aspidum..... USP, bot and tins.....lb.	...	1.25
Capsicum, USP, bot and tins ..lb.	2.15	2.30
Cubeb, USP, bot and tins..lb.	2.30	2.60
Ginger bot and tins.....lb.	2.25	2.80
Malefern see Aspidum.....		
Orris, bot & tins.....lb.	12.00	15.00
Pepper, black, USP, bot & tin ..lb.	....	9.50
Vanilla, bot & tins.....lb.	3.80	4.00
Paracresol Methyl Ether....lb.	4.25	4.50
Paracresyl Acetate.....lb.	5.50	5.75
Para Cymene Refd 110 gal dr ..gal.	2.25	2.50
PHENYLACETALDEHYDE 50% 1 lb bot.....lb.	**4.50**	**4.75**
Imported 50%..lb.	**4.50**	**4.75**
100%..lb.	8.00	8.25
Phenylacetic Acid 1 lb bot..lb.	2.65	2.90
Phenyl Diacetate 1 oz bot...oz.	3.00	3.25
1 lb bot..lb.	8.00	10.00
Imported..lb.	7.00	7.75
Phenylethyl Alcohol 1 lb bot..lb.	3.75	4.00
Phenyl Ethyl Acetate.....lb.	8.25	8.75
Butyrate 1 lb bot.....lb.	15.00	16.00
Formate, 1 lb bot.....lb.	19.00	21.00
Propionate, 1 lb bot.....lb.	10.00	12.00
Valerate, 1 lb bot.....lb.	14.00	15.00
Phenylpropylalcohol, 1 lb bot ..lb.	8.50	9.00
Rhodinol, 1 lb bot.....lb.	7.00	15.00
Skatol, 1 oz bot.....lb.	4.50	7.00
Terpinyl Acetate, 25 lb cans..lb.	.85	.90
Imported, 25 lb cans.....	.85	.90
TERPINEOL, CP, 1000 lb drs ..lb.	.33	.34
50 lb cans..lb.	.36	.37
Absolute, 25 lb cans.....lb.	.48	.50
TOLYL ALDEHYDE, F.F.C. 40 lb. carboys.....lb	2.10	2.25
Valerianic Ether see Ethyl Valerate.....		
Vanillin (Clove Oil), USP..lb. (Guaiacol) USP.....lb.	4.50 4.25	4.75 4.50

Essential Oils

Almond Bitter, USP, 5 lb bot lb.	2.00	2.10
Bitter, ffPA, 5 lb bot.....lb.	2.10	2.20
Sweet, 56 lb cans.....lb.	.75	.78
Almond Meal, 25 lb cans....lb.	.18	.19
Amber crude, 25 lb tins.....lb.	.18	.20
Rectified, 25 lb tins.....lb.	.55	.60
Amber liquid, 400 lb drs.....lb.	2.20	2.30
Ambergris, Black, boxes.....oz.	14.00	15.00
Gray boxes..oz.	25.00	30.00
Angelica Root, 1 lb bot.....lb.	26.00	29.00
Anise Tech, 400 lb drums...lb.	.40	.43
USP, 60 lb cans..lb.	.44	.47
Apricot Kernel, 50 lb cans...lb.	.22	.23
Bay, 25 lb tins N. F. V., 50.55% Phenol..lb.	1.65	1.80
Terpeneless..lb.	4.25	4.45
BERGAMOT, 25 lb coppers..lb.	1.70	1.95
Terpeneless..lb.	6.25	8.00
Artificial, 25 lb cans.....lb.	1.00	1.40
Birch, Sweet, Northern, 25 lb tins..lb.	3.00	3.10
Southern, 25 lb tins.....lb.	...	1.85
Birch Tar, rect., 5 lb bot.....lb.	.50	.55
Crude, 50 lb tins.....lb.	.13	.14
Bois de Rose, tins..... Brazilian..lb.	1.00	1.10
Cayenne, tins..lb.	2.50	3.00
Cade, 25 lb cans..lb.	.32	.38
Cajuput, native, 50 lb tins..lb.	.45	.57
Calamus, 5 lb bot.....lb.	2.75	3.00
Camphor Sassa, 1000 lb drs..lb.	.13	.15
White, 400 lb drs.....lb.	.16	.18
Cans, 50 lbs.....lb.	.18	.20
CANANGA, Native 25 lb tins ..lb.	2.00	2.10
Rectified, 25 lb tins.....lb.	2.50	2.60
Caraway, USP..lb.	1.95	2.00
Cardamon, NF, 1 lb bot.....lb.	14.00	15.00
Cascarilla, 1 lb bot.....lb.	56.00	70.00
Cassia, Redist, USP, 50 lb cans...lb.	1.10	1.15
Cedar Leaf, 50 lb tins.....lb.	.70	.75
Cedar Wood, light, 1000 lb drs ..lb.	.31	.35
Celery, 1 lb bot.....lb.	10.50	12.50
Chaulmoogra, USP 80 lb cases lb.	...	1.50
Cinnamom Ceylon, 1 lb bot..lb.	8.00	10.00
Leaf, 5 lb bot.....lb.	1.85	1.95
CITRONELLA Ceylon, 1000 lb drs.....lb.	.38	.39
50 lb tins.....lb.	.40	.41
Java, 400 lb drs.....lb.	.52	.54
50 lb tins.....lb.	.54	.56
Civet, Abyssin, horns.....oz.	2.10	3.00
Cloves, USP, 50 lb cans.....lb.	.90	.95
6 lb bot.....lb.	.99	1.10
Copaiba..lb.	.55	.60
Coriander, USP, 10 lb bots..lb.	4.10	4.35
Croton USP, 25 lb tins.....lb.	2.25	2.50
Cubebs, USP, 5 lb bot.....lb.	2.55	2.85
Cumin, 1 lb bot.....lb.	7.00	**7.50**
Dill, 25 lb cans.....lb.	3.25	**5.25**
Erigeron, 20 lb tins.....lb.	.65	.90
EUCALYPTUS Austl, USP, 56 lb cans, cases.....lb.	.27	.29
500 lb drs..lb.	.25	.27
Fennel, USP, 25 lb tins.....lb.	1.15	1.40
Geranium African, 25 lb tins..lb.	5.25	5.75
Bourbon, 28 lb tins.....lb.	5.15	5.50
Turkish, 28 lb tins.....lb.	2.15	2.50
Ginger, 1 lb bot.....lb.	3.40	3.75
Gingergrass, 28 lb tins.....lb.	**2.50**	**2.70**
Grape Fruit.....lb.	3.00	3.15
Hemlock, 25 lb tins.....lb.	.75	.90
Juniper Berries, USP, 25 lb tins ..lb.	1.20	2.00
Wood, 50 lb tins.....lb.	.50	**.60**
Labdanum, 5 lb bot.....lb.	**5.50**	**6.00**
LAVENDER, USP, 28 lb tins ..lb	1.90	3.25
Spike Spanish, 50 lb cans..lb.	.57	.80
Lemon Ital, 25 lb cans.....lb.	1.00	1.25
California 35 lb cbys....lb.	...	.75
Lemongrass, native, 50 lb cans ..lb.	1.05	1.40
Limes, expressed, 25 lb tins..lb.	10.00	12.50
Distilled, 25 lb tins.....lb.	7.25	7.75
Linaloe Mex., 70 lb cases....lb.	...	**1.40**
Mace, distilled, 50 lb tins...lb	1.10	1.15
Mandarin, 25 lb cases.....lb.	3.75	4.00
Musk Tonquin, tins, Pods...oz.	16.00	20.00
Tonquin, tins, Grained..oz.	18.00	22.00
MUSTARD, USP, 1 lb bots..lb.	8.50	**9.00**
Artif, USP, 5 lb bot.....lb.	1.65	1.75
Neroli Bigarade, ¼ & ½ & 1 lb bot ..lb.	75.00	**105.00**
Petale, 1 lb bot.....lb.	**95.00**	**105.00**
Artificial, 1 lb bot.....lb.	5.00	15.00
Nutmeg, USP, 50 lb tins....lb	1.10	1.15
ORANGE BITTER, 25 lb tins ..lb	1.20	1.50
Sweet African 25 lb. tins..lb.	1.15	1.20
Sweet W Ind, 25 lb tins..lb	1.30	1.50
Italian, 25 lb cop.....lb	1.40	1.60
Orange American, Cold pressed 25 lb tins.....lb.	...	1.00
Distilled, 25 lb tins.....lb.	...	.55
Spanish, 25 lb tins.....lb.	...	1.60
Oil Orris, concrete.....oz.	**4.00**	**4.25**
Origanum, 50 lb cans tech...lb.	**.25**	**.27**
Parsley, 1 lb bot.....lb.	7.25	7.50
Patchouli, 5 lb bot.....lb.	3.50	4.25
Pennyroyal, dom, 25 lb tins..lb.	1.95	2.00
Imported, 25 lb tins.....lb.	1.45	1.60
Pepper Black lb.,.....	...	**6.00**
Peppermint, nat. 60 lb cases lb.	2.50	2.70
Redis, USP, 60 lb cs.....lb.	2.85	3.20
Petit Grain S A., 25 lb tins..lb.	1.00	1.05
French, 1 lb bot.....lb.	**4.50**	**4.75**
Italian, 25 lb tins.....lb.	**2.20**	**2.30**
Pimento Leaf, 25 lb tins ....lb	1.15	1.30
Berries, 25 lb tins .....lb	3.00	3.10
Pine Needle Siberian, cans..lb.	.75	.95
Pinus, Sylvestris, 25 lb tins..lb.	1.40	2.00
Pumilio, USP, 25 lb tins...lb.	1.85	1.90
Rose Fr, 8, 16, & 32 oz pkgs..lb.	14.00	**17.00**
Bulg, 8, 10 & 32 oz pkgs...oz.	6.00	**17.00**
Rosemary, USP, 27½ lb tins..lb.	.34	**.40**
1000 lb drums.....lb.	.32	.38
Tech, 25½ lb tins.....lb.	.26	.28
Rue, 1 lb bot.....lb.	2.25	2.50
SANDALWOOD, E Ind ,USP, 100 lb case.....lb.	5.50	6.50
W Indian (Amyris), 25 lb. tins.....lb.	**2.85**	**2.95**
Australian, Tins.....	5.25	5.65
Sassafras, USP, 50 lb cans...lb.	.90	1.05
Artificial, 1000 lb drs, 60 lb cans.....lb.	.21½	.24
Safrol, cans.....lb.	.27	.29
Sage, Dalmatian, 25 lb. cans.lb.	**2.00**	**2.10**
Savin, 50 lb tins.....lb.	1.85	2.00
Snakeroot, Canada.....lb.	**8.25**	**8.50**
SPEARMINT, USP, 50 lb tins ..lb	1.15	1.35
Spruce, 50 lb tins.....lb	.70	.75
Tansy, American, 25 lb tins..lb.	2.00	2.05
Tar, 50 gal bbls.....lb.	.25	.30
USP, 50 gal bbls.....lb.	.75	**1.50**
Thyme, red, NF, 25 lb tins..lb.	.65	.80
White, NF, 25 lb tins.....lb.	.80	1.05
Tech, 110 lb drums.....lb.	**.50**	**.55**
Turpentine, USP, rect cbys..lb.	.27	**.30**
Vetivert Bourbon, 10 bot....lb.	4.75	5.00
Indian, 1 lb bot.....lb.	22.00	28.00
Java, 1 lb bot.....lb.	12.00	**13.00**
Wine, heavy, 1 lb bot.....lb.	1.50	1.60
WINTERGREEN Gaultheria, true, 25 lb tin.....lb.	**8.00**	**10.00**
Southern, 25 lb tins....lb.	**3.75**	**4.00**
Synthetic see Methyl salicylate.....		
Wormseed, Balt, 25 lb tins...lb.	2.20	2.40
Wormwood, dom, 25 lb tins..lb.	3.25	3.50
Ylang Ylang Bourbon, 10 lb tins No. 1.....lb.	4.75	5.50
10 lb tins No. 2.....lb.	3.50	3.75
Manila, 1 lb bot.....lb.	22.00	30.00

Drugs and Spices

Aconite Root, USP, bags	lb.	.13	.14
Agar Agar, No. 1, bales	lb.	.49	.52
Agar Agar No. 2, bales	lb.	.44	.48
Aletris Root, bags	lb.	.17	.19
Alkanet Root, bags	lb	.11	.13
ALOES, Cape, 400 lb cases.	lb.	.10	.11
Curacao, 140 lb cases	lb.	.10	.11
Socotrine, Whole, 300 lb cs	lb.	.30	.32
Althea Root, bags	lb.	.14	.16
Cut cases	lb.	.20	.21
Angelica Root, bags	lb.	.24	.40
Angostura Bark, bags	lb	.19	.20
Anise seed Star, bags	lb	.11	.11½
Spanish, bags	lb	.10	.11
ARABIC GUM, White, No. 1, 220 lb bags	lb.	.16	.17
Seconds, 220 lb bags	lb.	.14	.15
Sorts, Amber, 220 lb bags	lb.	.08	.08½
Powd, USP, 300 lb bbls	lb.	.12	.15
Areca Nuts, 100 lb bbls	lb.	.05	.07
Powd, 100 lb bbls	lb.	.10	.11
Arnica Flowers, bales	lb.	.12	.13
Root, bags	lb.	.40	.41
Arrowroot, St. Vincent, powd bbls	lb.	.09	.09½
Asafoetida, 250 lb cases	lb.	.18	.20
Powd, 50 lb boxes	lb.	.32	.35
Balm Gilead Buds, bags	lb.	.20	.21
Balmony Herbs, bales	lb.	.10	.12
BALSAM COPAIBA Para, 80 lb cases	lb.	.27	.29
South American, USP, 80 lb cases	lb.	.29	.31
Peru, 120 lb cases	lb.	.90	.95
Tolu, 90 lb cases	lb.	.78	.88
Barberry Bark, of root, bags	lb.	.15	.17
Bayberry Bark, bales	lb.	.07	.08
Wax bbls	lb.	.15	.17
Bees Wax, White, cases	lb.	.32	.36
Yellow refined cases	lb.	.25	.28
Yellow Crude Bags	lb.	.20	.24
BELLADONNA LEAVES, bale	lb.	.13	.16
Root, bags	lb.	.12	.14
Benzoin Gum, Siam, boxes	lb.	1.05	1.30
Sumatra, cases	lb.	.22	.24
Berberis Aquafolium Root, bags	lb.	.09	.10
Beth Root, bags	lb.	.08	.09
Black Indian Hemp Root, 100 lb bags	lb.	.11	.12
Blood Root, bags	lb.	.11	.12
Blueflag Root, bags	lb.	.12	.13
Boldo Leaves, bales	lb.	.11	.13
Boneset Herb, bales	lb.	.08	.09
Borage Flowers, bales	lb.	.19	.20
Broomtop Herb Cut, bales	lb.	.08	.09
Bryonia Root, bags	lb.	.10	.11
BUCHU LEAVES Short, 250 lb. bales	lb.	.19	.21
Long bales	lb.	.75	.80
Buckbean Leaves, bales	lb.	.09	.10
Buckthorn Bark, bags	lb.	.06	.07
Berries, bags	lb.	.29	.34
Burdock Root, bags	lb.	.11	.12
Seed bags	lb.	.30	...
Burgundy Pitch, 110 stand gross for net	lb.	.08	.09
Imported	lb.	.10	.11
Calabar Beans, bags	lb.	.15	.16
Calamus Root, blchd cases	lb.	.23	.25
Unbleached, bags	lb.	.07	.08
Calendula Petals, imp bales	lb.	.50	.52
Calisaya Bark, bales	lb.	.17	.18
Powdered, bbls	lb.	.22	.23
Canary Seed, South America, bags	lb.	.03½	.04
Morocco	lb.	.03½	.04¼
Turkish	lb.	.03½	.04
Candelilla Wax, bags	lb.	.09½	.11
Cannella Alba Bark, bales	lb.	.25	.26
Cannabis, U.S.P.	lb	.16	.23
Cantharides, Chinese, cases	lb.	1.00	1.05
Powdered, boxes	lb.	1.15	1.25
Russian, cases	lb.	1.80	2.00
Powdered, boxes	lb.	2.25	2.45
Caraway Seed, Dutch, bags	lb.	.09½	.10
Cardamon bleached, cases	lb.	.80	1.10
Decorticated, cases	lb.	.68	.70
Carnauba Wax No. 1, 100 lb. bags	lb.	.27½	.28½
Cascara Amarga, 150 lb bbls	lb.	1.25	1.30
So called bales	lb.	.25	.30
CASCARA SAGRADA, 1931 bark	lb.	.11	.12
1932 bark	lb.	.10	.11
New crop	lb.	.09	.10
Cascarilla Bark, quills, bales	lb.	.70	.75
Siftings, bbls	lb.	.50	...
Cassia Batavia No. 1 bales	lb.	.10½	.10¾
Shortstick, bales	lb.	.09½	.10
Batavia No. 3, bales	lb.	.08	.08½
China Select Rolls, cases	lb.	.05½	.06¼
Broken, bales	lb.	.04½	.05
Saigon, thin	lb.	.18	.18½
Buds, cases	lb.	.12	.12½
Fistula, baskets	lb.	.07½	.09
Catnip, Herb, bales	lb.	.14	.15
Celery Seed, bales	lb.	.70	.72
Ceresin Wax, White, bags	lb.	.12	.16
Yellow 200 lb. bags	lb.	.11	.13
Imp. white 100 lb. bags	lb.	.22	.38
CHAMOMILE FLOWERS Roman, bales	lb.	.35	.37
Hungarian, cases	lb.	.16	.17
Charcoal Willow, powd, bbls	lb.	06	.06½
Wood, powd, bbls	lb.	.04	.05
Chestnut Bark	lb.	.07	.08
Leaves bales	lb.	.05	.06
Chicle Gum, 200 lb. bales	lb.	.27	.30
Chiretta, bales	lb.	.13	.14
Cinnamon, Ceylon, No. 1, bales	lb.	.12	.14
No. 2 bales	lb.	.09½	.10
Clover Tops, Red, bags	lb.	.16	.18
Cloves Zanzibar, bales	lb.	.11¼	.11¾
Cochineal, Black	lb.	.51	...
Silver	lb.	.45	...
Cohosh Root, Black, bags	lb.	.05	.06
Blue, bags	lb.	.06	.07
Colchicum Root, bags	lb.	.11	.13
Seed, bags	lb.	.60	.65
COLOMBO ROOT, bags	lb.	.05	.07
Colocynth Pulp, bales	lb.	.13	.14
Coltsfoot Leaves, bags	lb.	.07	.08
Comfrey Root, bags	lb.	.11	.12
Condurango Bark, bags	lb.	.09	.10
Coriander Seed, Morocco, bags	lb.	.06	.07
Bleached, bags	lb.	.08	.09
Corn Silk, bales	lb.	.06	.07
Cotton Root Bark, bales	lb.	.07	.08
Cowhage, 1 oz tins	oz.	1.00	...
Cramp Bark so called bales	lb.	06	.07
True, bags	lb.	.23	.25
Cranesbill Root, bags	lb.	.08	.09
CUBEB BERRIES, XX bags	lb.	.30	.31
Powdered, boxes	lb.	.32	.33
Culvers Root, bags	lb.	.13	.14
Cumin Seed, Morocco, bags	lb.	.15	.15½
Cuttlefish, Bone Trieste, Straps	lb.	.19	.22
French, boxes	lb.	.18	.21
Powdered, bbls	lb.	.09	.10
Broken, bales	lb.	.07	...
Damiana Leaves, bales	lb.	.16	.17
Dandelion Root, Imp. bags	lb.	.14	.15
Deer Tongue Leaves, bales	lb.	.07	.09
Digitalis Leaves, bales	lb.	.26	.28
Dogwood Bark, Jamaica bags	lb.	.07	.08
American bales	lb.	.06½	...
Doggrass Root, USP, cut bags	lb.	.11	.12
Dragons Blood Mass, cases	lb.	.80	.85
Reeds, boxes	lb.	.85	.90
Echinacea Root, bags	lb.	.21	.22
Elcampane Root, bags	lb.	.06	.07
Elder Flowers, bags	lb.	.14	.15
Elemi Gum, 85 lb cases	lb.	.09½	.10
Elm Bark, bundles	lb.	.16	.17
Grinding bags	lb.	.08½	.09½
Powdered, bbls	lb.	.15	.18
Ephedra Vulgaris, bales	lb.	.05	.06
ERGOT, 150-200 lb bags	lb.	.39	.45
Eucalyptus Leaves, bales	lb.	.06	.07
Euphorbia Pilulifera, Herb, bags	lb	.06	.08
Euphorbium Gum, cases	lb.	.17	.20
Fennel Seed, French, bags	lb.	.08	.08½
German bags	lb.	.09	.10
Foenugreek Seed, 200 lb bags	lb.	.04	.04½
Fish Berries, 100-125 lb bag	lb.	.14	.15
Flax Seed, Whole 182 lb bbls	lb.	.05½	.06½
Ground, 180 lb bbls	lb.	.06	.07½
Fringe Tree Bark or Root bags	lb.	.10	.12
Fumigating Pastiles, boxes	lb.	.28	.30
Galangal Root, bags	lb.	.08	.09
Galbanum Gum, cans	lb.	.85	.90
Gamboge Gum, 100 lb cases	lb.	.53	.55
Powdered, cases	lb.	.65	.70
Gelsemium Root, bags	lb.	.07	.08
GENTIAN ROOT, bags	lb.	.15	.16
Ground bbls, boxes	lb.	.17	.18
Powdered, bbls, boxes	lb.	.18	.19
Ginger, African, bags	lb.	.05½	.06½
Jamaica Grinding bags	lb.	.15	.18
Cochin ABC & Lemon, bags	lb.	.05½	.06
Ginseng Root, cultivated cs	lb.	8.00	10.00
Wild Southern, cases	lb.	11.00	13.00
Golden Seal Root, bags	lb.	.90	.95
Powdered, boxes	lb.	1.00	1.10
Herb, barrels	lb.	.35	.40
Grains of Paradise, bags	lb.	.09	.10
Grindelia Robusta, Herb, bale	lb.	.07	.08
Guaiac Gum, 150 lb cases	lb.	.20	.22
Strained 75 lb cases	lb.	.70	.75
Guarana, tin cases	lb.	.50	.55
Hellebore Root, Black, bbls	lb.	.05½	.06
White, 250 lb bbls	lb.	.07	.08
Powdered	lb.	.10	.11
Helonias Root, bags	lb.	.25	.27
Hemp Seed, bags	lb.	.03	.03½
Henbane Leaves, USP, bales	lb.	.11	.12
HENNA LEAVES, bales	lb.	.07	.08
Powdered	lb.	.10	.15
Hops, bales	lb.	.55	.60
Horehound, Herb, bales	lb.	.06½	.07
Hydrangea Root, bales	lb.	.06	.07
IPECAC ROOT, Cartagena, bags	lb.	.75	.80
Powdered, 220 lb bbls	lb.	.85	.90
Nicaraugua. 125 lb. bags	lb.	.60	.65
Isinglass, American, 130 lb cases	lb.	.95	1.00
Russian (Beluga), boxes	lb.	4.50	...
Jaborandi Leaves, bales	lb.	.10	.11
Jalap Root, Whole, 150 lb bag	lb.	.16	.17
USP, Powd, 250 lb bbls	lb.	.20	.21
Japan Wax 224 lb. cases	lb.	.06¾	.07½
JUNIPER BERRIES, 125 lb bags	lb.	.06½	.07
Kamala, boxes	lb.	.21	.22
Karaya Gum, Powdered, bbls	lb.	.09	.25
Kava Kava Root, bags	lb.	.13	.14
Kino Gum, Black, cases	lb.	.70	.75
Kola Nuts, 150 lb bags	lb.	.05½	.06
Lady Slipper Root, bags	lb.	.28	.30
Larkspur Seed, bags	lb.	.25	.27
Laurel Berries, bags	lb.	.08	.09
Leaves, Greek, bales	lb.	.04½	.04¾
Lavender Flowers, Ordinary	lb.	.20	.24
Selected	lb.	.35	.37
Lemon Peel, bags	lb.	.08½	.09
LICORICE ROOT, Whole bbls	lb.	.12	.15
Spanish Natural bales	lb.	.05½	.07
Powdered, bbls	lb.	.09	.11
Selected Cases	lb.	.12	.15
Cutting, 125 lb bags	ln.	.06	.06½
Turkish, 150 lb bales	lb.	.05	.06
Linden Flowers with leaves, bales	lb.	.14	.15
Without leaves, bales	lb.	.15	.16
Liverwort Leaves, bales	lb.	.13	.14
Lobelia, Herb, bales	lb.	.23	.25
Seed, bags	lb.	.26	.28
Lovage Root, Imp., bags	lb.	.15	.17
Lupulin N. F., tins	lb.	1.75	2.00
Lycopodium, 88 lb. cases	lb.	.30	.32
MACE SIAUW, No. 1, cases	lb.	.43	.48
Banda No. 1, cases	lb.	.46	.50
Batavia No. 2, cases	lb.	.23	.24
Malva Flowers, Blue, bales	lb.	.60	.65
Black, bales	lb.	.18	.33
Leaves, bales	lb.	.12	.13
Manaca Root, bales	lb.	.18	.19
Manna, Large Flake, cases	lb.	.40	.45
Small Flake, cakes	lb.	.25	.30
Sorts, cases	lb.	.45	.50
Mandrake Root, bags	lb.	.08½	.09
Marjoram, Herb	lb.	.28½	.29
French, No. 1 bales	lb.	.25	.26
German, bales	lb.	.30	.35
Mastic Gum, 120 lb. cases	lb.	.19	.21
Matico Leaves, bales	lb.	.15	.16
Mezereon Bark, bags	lb.	.03¼	.03¾
Millet Seed, Yellow, bags	lb.	.07	.08
Montan Wax, Crude, bags	lb.	.26	.30
Bleached, pure, bags	lb.	.09	.10
Moss, Iceland, bales	lb.	.11	.12
Irish, Bleached, bales	lb.	.95	1.00
Mullein Flowers, tins	lb.	.07	.07½
Leaves, bales	lb.	.06	.07
Musk Root, Russian, bags	lb.	.21	.23
Myrrh Gum, 200 lb, cases	lb.	.22	...
Nutgalls, Chinese, bags	lb.	...	.20
Aleppy, bags	lb.	.13	.15
Powdered, bags	lb.	.13	.13½
Nutmegs, 110's cases	lb.	.16½	.17
75's & 80's cases	lb.	.09	.09½
Grinding, bags, W.I.	lb	.05	.06
NUX-VOMICA Buttons, bag	lb.	.08½	.09½
Powdered, 200 lb bbls	lb.	.05½	.06
Oak Bark, bags	lb.	.06	.07
Olibanum Gum, 280 lb cases Siftings	lb.	.19	.21
Tears, No. 1 Extra	lb.	.14	.15
No. 2	lb.	.09	.10
No. 3	lb.	10.00	11.00
Opium Gum, USP, cases	lb.	11.00	12.00
Granular, cans	lb.	11.00	12.00
Powdered, USP, cans	lb.	.25	.30
Orange Flowers, cases	lb.	.08	.09
Peel, Bitter, bags	lb.	.09	.10
Sweet bags	lb.	.10	.11
ORRIS ROOT, Flor. bid. bags	lb.	.13	.14
Powdered, 200 lb bbls	lb.	.07	.08
Verona, bags	lb.	.11	.12
Powdered, 200 lb bbls	lb.	.80	.85
Fingers, boxes	lb.	...	...
Ozokerite Wax, Brown, Hard	lb.	.28	.30
Bags	lb.	.40	.42
Green, Hard, bags	lb.	.22	.26
Yellow, Refined, bags	lb.	1.55	1.60
Papain, Crude, 150 lb cases	lb.	1.70	2.00
Pure, Powdered, 10 lb bot	lb.	.19	.23
Paprika, Spanish, bags	lb.	.21	.22
Mild Hungarian, bags	lb.	.16	.18
Pareira Brava Root, bags	lb.	.05½	.06½
Passion Flower, bales	lb	.15	.16
Patchouli Leaves, bales	lb.	.08	.09
Pennyroyal, Herb, 100 lb bags	lb.	.11	.12
Leaves, 100 lb bags	lb.		

Drugs and Spices

PEPPERMINT LEAVES, Imp bales lb.	.30	.50
Domestic, bales lb.	.18	.20
Pichi Leaves, bags lb	.08	.09
Pimento Select, bags lb.	.06	.06½
Pink Root, True, bags lb.	.26	.28
Pleurisy Root, bags lb.	.13	.14
Poke Berries, bags lb.	.15	.16
Root, 200 lb bales lb.	.05½	.06
Pomegranate Bark of Root, bags lb.	.25	.28
Bark of Fruit, bags lb.	.15	.20
Bark of Tree, bags lb.	.15	.17
POPPY FLOWERS, Red, bags lb.	.40	.45
Prickly Ash Bark lb.	.12	.15
Southern bags lb.	.11	.11½
Northern, bags lb.	.12	.13
Berries, bags lb.	.20	.21
Prince's Pine, bales lb.	.15	.20
Psyllium Seed, Black, bags lb.	.14	.16
Plantago Seed, Blonde, Bags lb.	.06	.07
Pulsatilla, Herb, bags lb.	.11	.12
Pumpkin Seed, bags lb.	.11	.12
Pyrethrum Flowers lb.	.26	.28
Pwd., pure, 200 lb.bbls. lb.	.29	.31
Quassia Chips, bags lb.	.07	.08
Quebracho, bulk, 125 lb. bbl. lb.	.20	.21
Quince Seed, Spanish bags lb.	.60	.65
Persian, bags lb	.85	1.25
Rape Seed, German, bags lb.	.04½	.05½
Dutch, bags lb.	.05	.05½
Raspberries, Dried, bbls lb.	.30	.35
Red Saunders, bags lb.	.08	.09
Rhatany Root, bags lb.	.11	.12
Rhubarb Root, HD, cases lb.	.19	.20
Powdered, bbls lb	.25	.26
Rosemary Leaves, bales lb.	.05½	.06
Flowers, cases, bales lb.	.28	.32
Rose Petals, pale lb.	.13	.14
Red lb.	.45	.50
Rue, Herb, bales lb.	.18	.20
Sabadilla Seed, bags lb.	.21	.22
Powdered, bbls lb.	.25	.26
SAFFRON FLOWERS, American, bales lb.	.16	.18
Valencia, 1 lb cans lb.	12.00	12.50
Sage Dalmatian, bales lb.	.04¼	.05¼
Sandarac Gum, 300 lb bbls. lb.	.27	.28
Sarsaparilla Root, Honduras, bales lb.	.55	.60
Mexican, bales lb.	.13	.14
Sassafras Bark, Ordinary, bales	.08	.10
Select, bales lb.	.13	.15
Savory Leaves, bale lb.	.05¾	.06½
Saw Palmetto Berries, bags lb.	.07	.08
Scammony Resin, boxes lb.	1.30	1.35
Root, bags lb.	.06	.07
Senega Root, bags lb.	.43	.46
SENNA ALEX., 150 lb cases lb.	.20	.25
Half leaf 150 lb bales lb.	.08	.10
Sifting, 400 lb bales lb.	.08	.09
Tinnevelly, Bold, 350 lb bales lb.	.09	.11
Medium Leaf lb.	.07½	.08½
Small Leaf lb.	.06	.08
Pods, 350 lb lb.	.08	.09
Powdered, 200 lb lb.	.08	.09
Serpentaria Root, bags lb.	.35	.36
Simaruba Bark, bales lb.	.23	.25
Skullcap Leaves, Eastern, bales lb.	.25	.30
Western, bales lb.	.14	.24
Skunk Cabbage, Natural, bales lb.	.13	.15
Snake Root, Canada Natural, bags lb.	.16	.18
Canada, Stripped, bags lb.	.40	.45
Soap Bark lb.	.08	.09
Cut, 125-175 lb bags lb.	.07	.08
Crushed, 200 lb bbls. lb.	.15	...
Powdered, bbls lb.	.09	.10
Spearmint Leaves, American, bales lb.	.17	.22
Spermaceti, blocks, cakes, cases lb.	.22	.23
Bulk lb.	.21	.22
Spikenard Root, bags lb.	.07	.08
Squaw Vine, bales lb.	.11	.12
Squills, White, tested lb.	.05	.07
Powdered, bulk lb.	.13	.15
Stavesacre Seed, bags lb.	.15	.16
Stillingia Root, bags lb.	.06	.07
Stone Root, bags lb.	.07	.08
St. Ignatius Beans, bags lb.	...	.90
St. John's Bread, bags lb.	...	.06
STRAMONIUM LEAVES, bales lb.	.10	.11
Seed, bags lb.	.07½	...
Strophanthus Seed, Kombe, bags lb.	1.50	1.65
Styrax Liquid, Artificial lb.	.26	.35
Genuine, USP lb.	.38	.43
Sunflower Seed, bags Calif. lb.	.05	.06
Tamarinds, bbls lb.	.05½	.06½
Kegs keg	3.75	3.85
Tansy, Herb, bales lb.	.12	.13
Thus Gum, 450 lb bbls lb.	.05½	.06½
THYME, Spanish, bags lb.	nominal	
French, bags lb.	.09½	.10
Tonga Root lb.	.20	.23
Bark lb.	.20	.23
Tonka Beans, Angostura Cases	2.25	2.50
Para cases lb.	.65	.75
Surinam cases lb.	1.35	1.50
Tragacanth Gum, No 1, 100 lb. cases lb.	1.00	1.10
No. 2 lb.	.90	1.00
No. 3 lb.	.70	.80
Powdered, 50 lb boxes lb.	.60	1.00
Turkish cases lb.	.50	.60
Turmeric Root Madras, bags lb.	.06	.06½
Aleppy bags lb.	.05¾	.06
Powdered lb.	.09	.11
China bags lb.	.11	.12
Turpentine Venice True, 80 lb cases lb.	.30	.38
Artificial, 80 lb cases lb.	.15	.16
Uva Ursi Leaves, bales lb.	.05	.06
Valerian Root, Belgium bags lb	.14	.16
VANILLA BEANS, Mexican, whole, cases lb.	3.00	4.00
Cuts, cases lb.	2.40	2.60
Bourbon, cases lb.	.80	1.25
Vetivert Root, 100 lb bags. lb.	.20	.25
Violet Flowers, bags lb.	.85	.90
Wahoo Bark of Root, bags. lb.	.35	.37
Bark of Tree, bags lb.	.13	.14
White Pine Bark, Roseed, bags lb.	.05½	.06
White Poplar Bark, bags lb.	.06	.07¼
Wild Cherry Bark, Natural thin, Green lb.	.06	.07
Rossed bales lb.	.09	.10
Thick Rossed, bales lb.	.04	.05
Wild Indigo Root, bags lb.	.09	.10
Willow Bark, bags lb.	.05	.06
White, bags lb.	.15	...
Witch Hazel Bark, bags lb.	.05	.06
Leaves, bales lb.	.06	.07
Wormseed, American, bags. lb.	.06	.07
Wormwood, Herb, Imp., bales lb.	.08	.09
Yellow Dock Root, bags, lb.	.08	.09
Yerba Mate, bags lb.	.15	.17
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Cinchona in Netherland India

It is reported that natives and small agriculturists have increased plantings of cinchona, mainly in the Soekanegara, Patjet, Soekeboemi, and Djampangtengah districts. In these districts the areas of young cinchona total about 300 hectares. Statistics covering the exports of factory cinchona bark from Netherland India for the first quarters of recent years were (in metric tons):

	1930	*1931*	*1932*	*1933*
From Java	491	392	477	359
From Outer Provinces	148	147	107	116
Total Netherland India	639	539	584	475

Botanicals in Chosen

Active steps are being taken to develop the cultivation of medicinal herbs in Chosen. The Japanese "Weekly Druggist" states that the Government-General of Chosen are encouraging the enterprise. All vacant lots available in the different prefectures of Chosen will be utilized for the cultivation of medicinal herbs which suits the respective soils and climates. Those of government offices will be especially used for this purpose. Joint distribution of herbs so raised will be encouraged. The authorities hope that by this way not only the inhabitants will increase their revenue but the country will be thereby beautified.

Drugs Detained

Following is a list of imports detained by the Food and Drug Administration being in violation of act governing product in question. Week ending August 9 to week ending September 6.

Caraway seed	1750 bags
Poppy	2150 bags
Balsam, Peru	10 cs.
Nutmegs	693 bags
Fennel seed	36 bags
Mustard seed	6 bags
Cinchona bark	51 bales
Peruvian	30 pkgs.
Henbane	9 bales
Cumin	794 bags
Digitalis leaves	21 bags
Coriander	2515 bags

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